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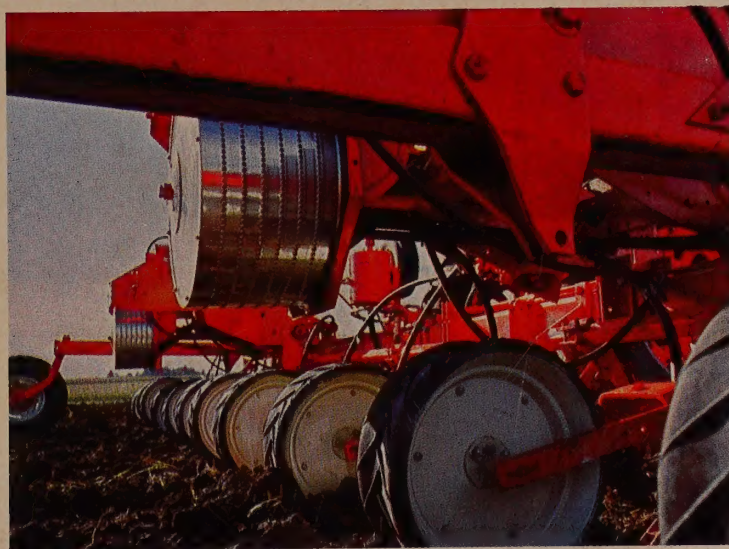
RETURN TO D. L. T.



INTERNATIONAL HARVESTER

1974 BUYER'S GUIDE

AGRICULTURAL EQUIPMENT



SYSTEMS
SELECTION

a common-sense approach to choosing machinery

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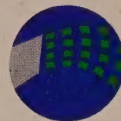
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Specifications subject to change without notice.

Plan a machinery system that fits your needs

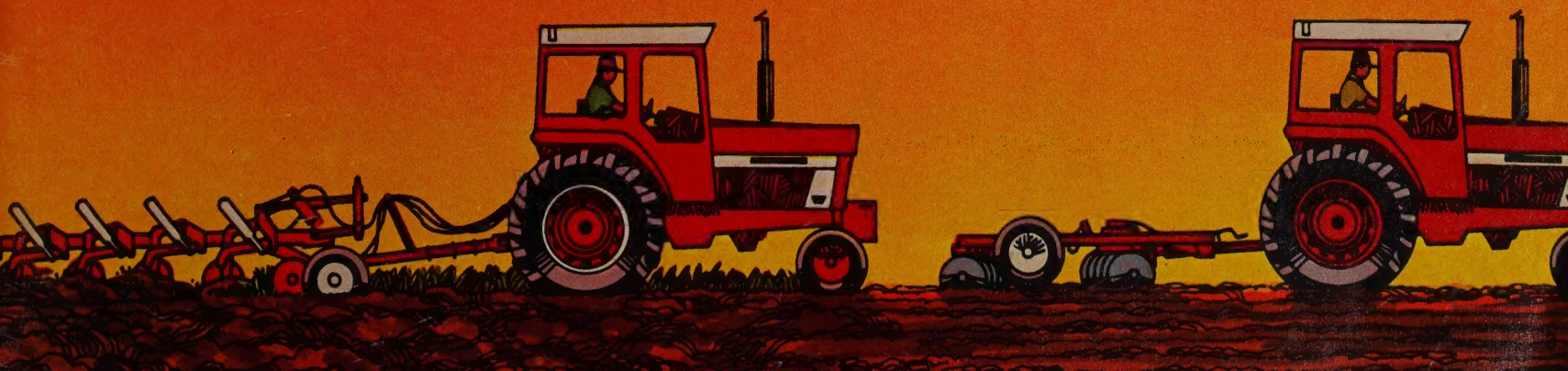
The "systems approach" to machinery selection. It's just common sense. Plowing, disking, planting, cultivating, combining, stalk chopping—they're all part of the same cropping system. And you know from your own experience that few field operations are completely independent of other production operations. For example: Late planting can cut yields and delay harvest. Late harvest can slow tillage. And late tillage can delay planting. Thus, having a machinery system that's not big enough to get field work done in the time available can contribute to a never-ending vicious cycle. That's why it's so important to think in terms of systems—properly matching combinations of machinery—when choosing equipment. These "facts of life" are not new to you as an agricultural producer. But sometimes it's easy to overlook some basic considerations in your eagerness to add a new piece of equipment. You'll want to consider the following reminders in making your machinery decisions.

Think total system. In other words, regardless of how small a particular field activity, it's all an integral part of the larger overall operation. Like the old saying, "A chain is as strong as its weakest link," the same could be said of a machinery system. That is, the field efficiency of any single machine may be limited by the capacity of other

equipment in the system. Thus, if you're underequipped in only one part of your operation, the whole system is likely to suffer. That means all of your farm machinery should be properly matched so they complement one another. And whatever it is you're adding to your machinery fleet, it's more than an individual machine—you need to look at the total picture.

Examine your overall operation. Just changing one machine in your farming operation can cause a chain reaction. Say, for example, that you decide to switch from 40-inch to 30-inch rows. You think a new 30-inch corn planter will solve the problem. But it creates a whole host of questions, because a planter is just one part of the system. For instance, will the new planter necessitate larger tillage equipment? Or, should you look at reduced tillage? Will your present tractor have the horsepower to handle larger machinery? Should you consider combining tillage with planting? And, once you get your crop planted, will your current cultivating equipment be adequate? Of course, you'll need a new combine corn head to handle the narrower rows. Also, if you are switching from a corn picker to a combine with a corn head, you'll want to re-evaluate your hauling and corn handling methods. And these are just some of the questions you need to think through before

Continued on next page



you make changes in your operation or add a new piece of farm equipment.

The important point is to be sure the size of your equipment is matched. And the more diversified your operation, the more difficult it will be to analyze just what combination of IH equipment best fits your operation—and what machines will give the maximum return per dollar invested. That's where International Harvester can be of assistance. Your IH dealer is anxious to help you examine your machinery needs and pick the right equipment for your particular conditions and machinery system.

Match implements to time available.

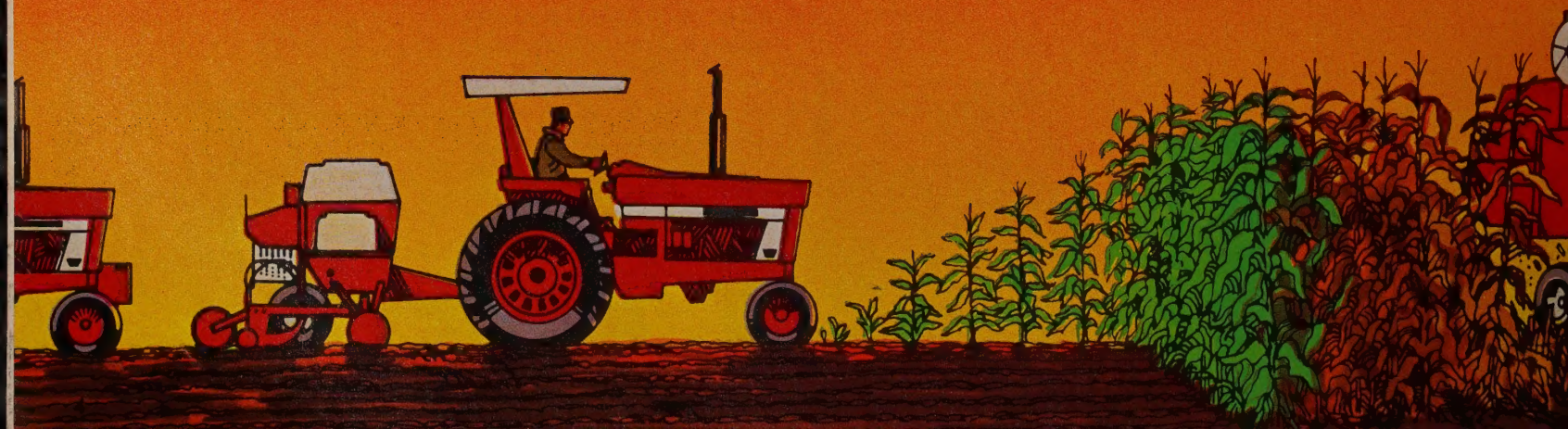
That's one of the first considerations you'll have to make in expanding or improving your farming operation. When you're puzzling over how big an implement to buy, a handy piece of information is the number of working days for each job you expect to have in bad weather years. Most universities and weather bureaus have these records for your state or region. But because weather conditions can vary between neighboring farms—there's no substitute for records you keep yourself. Once you know how many good days you'll have for each job, you can figure what IH equipment you'll need to get the job done on time by consulting the appropriate tables in the chapter introductions in this buyer's guide. The charts, based on American Society of Agricultural Engineers' standards, can

give you approximations for determining machinery needs. All figures in the tables make allowances for time spent turning at row ends, unloading, filling seed or fertilizer boxes, and other normal stops.

Size your machinery to beat the weather. For example, say you're a central Indiana corn grower, and past records indicate that the best time to plant corn in your area is between May 5 and 15. Checking with your county extension agent, you find that university trials show that corn planted before May 5 in your area is likely to cost you half a bushel an acre for each day you plant earlier than that. And after May 15, the same research says you'll lose about half a bushel a day for each day up to May 20. After that, yield reductions will be about 1 1/2 bushels per day.

Past experience has shown that your current system can disk and plant 25 acres of corn a day. And out of your 400 acres, that means you'll only get about 275 acres planted by May 20.

Then, if you planted 25 acres daily on May 22, 24, 26, 28 and 30, here's what could happen: Total yield loss would be 75 bushels on corn planted the 22nd, 159 bushels on May 24 corn, 225 bushels the 26th, 300 bushels the 28th and 375 bushels the 30th. Total possible yield loss because of too small equipment: 1,125 bushels. And that adds up to a sizeable number of dollars in lost income.



Although you probably wouldn't lose this much yield every year, it's a good example of how important it is to get your work done on time. And it doesn't take much figuring to see that what you would lose from reduced yields could go a long way toward offsetting the cost of bigger equipment, which could get the work finished on time. When deciding on tractor size, plow, combine, forage chopper or any other implement to buy, keep this in mind. As one size machine is used on an increasing number of acres, returns will gradually decline from lack of timeliness. And if you buy a bigger machine to gain a timeliness advantage, consider that the added revenue from doing things just right must be greater than the extra overhead cost.

Pick the system best-suited to your total farming operation. You can see from the preceding examples—as well as from your own experience—that a properly matched machinery system is a very basic requirement for an efficient farming operation. And that means you need to do a little planning for the future. Where do you want your operation to be next year? And what are your plans five years down the road? Before you make a machinery buying decision, figure ahead of time how a new piece of equipment will change—or fit into—your entire operation. If you plan to expand your enterprise a couple of years hence, think a little on the "big" side and

consider replacing older machinery with higher-capacity equipment. And try to match the machine to the job it'll be doing. Put big machinery to work on jobs where time is short. And, remember, machinery earns in many ways—it can improve quality of farm produce, reduce risks, lower losses or otherwise increase yields because of more timely planting and harvest.

Substitute machinery for muscle.

Probably the most significant way machinery can boost farm earnings, however, is in the area of replacing labor. Hired labor is scarce—or even non-existent—in many areas today. When machinery replaces hired labor, it's fairly easy to put a price tag on labor value. It's usually the going wage rate. If machinery replaces family labor that has little other useful earning power, value might be considerably lower. Equipment you buy today will, in many cases, replace labor you don't have and probably can't hire. But don't make the mistake of buying equipment that's too small, or lacks the work power to get the job done with the labor supply you do have. After thinking through your machinery needs—and taking into consideration the importance of systems selection—take a good look at the impressive IH lineup and buying information in the following pages. Then let your IH dealer help you select the International Harvester machinery system that best fits your individual needs.





Select power source to fit your system



tractors

Any way you look at it, you know it's essential to have your tractor properly matched to the rest of your machinery system. If you have tried to increase acreage, expand machinery size or found yourself short of help, you've probably discovered that the wrong size tractor can limit the flexibility of your entire farming operation. That's why many like to think a little on the big side when selecting a new power source.

Choose the right size. The size tractor you'll need depends on whether it'll be your main work horse or if you'll be using it primarily as a chore tractor. And you know that your specific requirements—plus local cropping, soil and climatic conditions—can affect the tractor-machinery combination you select. And that's where your local IH dealer can be of assistance. He can suggest properly matched systems for your particular circumstances.

Gasoline or diesel. If you're thinking in the 100-hp and above category, one of the powerful IH diesels will be your choice. But if you're looking for a tractor that's not quite that big in the power department, you'll have to consider fuel options. Generally speaking, diesel fuels usually cost less gallon-for-gallon than gas. And because diesels are more efficient, you know average fuel use is about 30% less than fuel consumed by a comparable gasoline tractor.

Which will be the more economical purchase depends not only on fuel economy, but also on the differences in initial purchase price, resale value, annual hours of use, costs of fuel and other operating expenses. University tests indicate that unless you use a diesel more than 400 hours each year, other costs may outweigh any fuel savings. So, if you're going to use the tractor only a few hundred hours a year, a gasoline tractor may be your choice.

Save time, speed work. That's where IH Hydrostatic tractors with infinite speeds and shift-on-the-go at full power can help. And it's one of several other considerations you'll need to make in choosing the best tractor for your system. Because IH Hydros use hydraulic fluid to transmit power from the engine to the drive wheels, there are no gears to shift, no clutch. Control is with one Speed Ratio (SR) lever. Push SR lever forward to move forward. The further you move it, the faster you go. Pull SR control back to the zero mph position, and you have a smooth, safe, controlled stop. Pull the SR lever into reverse ratio, and the tractor moves backward. And by using the HI-LO range selector, you can keep engine matched more efficiently to the job. LO for heavy tillage, HI for lighter loads.

Because Hydro lets you run the engine at full power, while varying the ground speed with the SR lever, you can slow down in tough spots—but maintain full PTO power.

It's like blowing on a fire. That might be the best way to describe International's turbocharging system. It's just one of several other IH features you'll want to consider. Because power output of a tractor engine is usually limited by air capacity to the engine, turbocharging packs more air into the cylinders. That makes it possible to increase fuel-to-air ratio to produce more power. On top of that, IH turbos give you better combustion, a cleaner exhaust. And the whirling turbo blades break down the roar, so you have less engine noise.

Put it all together. That may seem easier said than done. But check out International Harvester's handsome brutes and smaller workhorses on the following pages. Hydro. Turbo. Torque Amplifier. Brand new cabs. Four-wheel drive. Options galore. All are available to give you a tailor-made power source to meet your individualized needs. It's all part of the IH full-service package.



Tractors

66 series

International. Farmall. A classic line of tractors through the years, still setting the pace today in power, performance and dependability



1466 Turbo

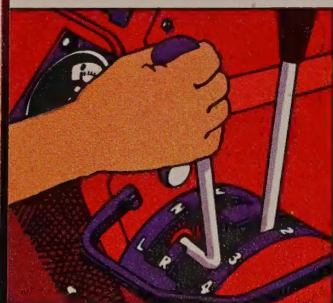
The 66 Series Internationals team long-life dependability with what really separates the workhorses from the ponies—power to get the job done. And you get quietness and comfort that help put your mind at ease.

1466 Turbo

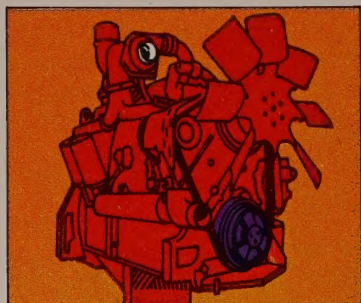
The "big daddy" in the 66 Series. Its powerful International 436 cu. in. diesel engine develops 145.7 PTO hp. This remarkable engine gives you more power with less noise . . . hard pulling with less smoke. Has 8 speeds forward, 4 reverse. Or 16 and 8 with optional shift-on-the-go Torque Amplifier. As with all tractors in the 66 Series, the 1466 is equipped with Isomount isolators—specially-designed rubber mountings—that soften noise and vibration. We use them in mounting the operator's platform, fenders, steering column, gear selector support, fuel tank and sheet metal to the basic tractor. And we use them to mount our tractor cabs, too. Choice of custom cab or deluxe model that offers the ultimate in comfort plus built-in safety frame protection.

More 66 Series features

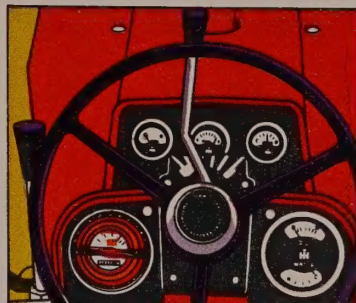
Torsion bar draft control gives you precise control over 3-point hitch implements. You get steady, unwavering engine operation even in rough terrain. Double-disc dry power brakes are smooth and sure for stops and turn assist. Dyna-Life 14-inch clutch lasts longer than fiber-type clutches. Handy option: Hydraulic clutch control to take the work out of clutching, lessen fatigue. Gauges, not lights, keep you informed of vital engine functions. And they're in a cluster for quick-glance reading. Other outstanding features include massive rear axle, smooth hydrostatic steering, heavy duty Wedge Lock rear wheels, and optional hydraulically-controlled seat.



Modern transmission design makes for easy shifting



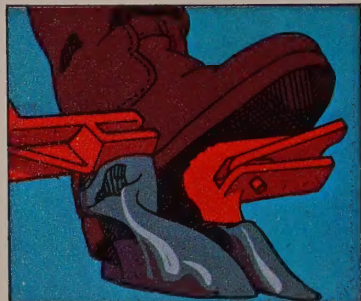
High-performance IH engines are most dependable on market



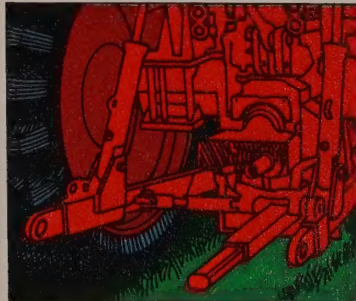
Cluster of gauges allows quick-glance reading



Hydraulic clutching lessens operator fatigue



Double-disc dry power brakes are smooth and sure



Torsion bar draft control reduces need to downshift

1468 Turbo

Here's a row crop tractor with an exciting difference—a massive 550 cu. in. V-8 diesel engine. This remarkable 145 PTO hp workhorse runs smooth, warms up fast. And with twin-aluminized heat-shielded mufflers, you get the true sound of V-8 power. Unique fuel injection system gives top efficiency and economy—injects fuel to only 4 cylinders under light load, then to all 8 under heavier load. Standard 1468 transmission is an easy-shifting 8 forward, 4 reverse system. Or you can add optional Torque Amplifier and get 16 forward, 8 reverse speeds, plus shift-on-the-go without touching clutch or throttle. Has a full complement of standard and optional comfort and convenience features.

1066 Turbo

A popular tractor known for its lugging ability, plus ease of handling. Powerful 414 cu. in. turbo diesel develops 125.6 PTO hp. Smooth shifting transmission with 8 speeds forward, 4 reverse. Also available with optional Torque Amplifier that gives you 16 forward, 8 reverse speeds, plus on-the-go shifting. Wedge Lock rear wheels let you change treads simply by loosening one bolt per wheel. And for the ultimate in comfort and convenience, you can choose from nearly all the features found on the bigger 1466 model.



1468 Turbo



1066 Turbo



Tractors

966 Tractor

A popular 100.8 PTO hp tractor with a 414-cu. in. direct injection diesel engine. Standard transmission has 8 forward speeds, 4 reverse. Precise torsion bar draft control system senses load changes as often as three times a second. You get steady engine operation even in rough terrain—less need for downshifting. Isomount isolators eliminate metal-to-metal contact, thereby reducing noise. As with all 66 Series tractors, more precise gauges, not lights, are used on instrument panel. And all gauges are clustered for quick-glance checking. Has comfortable 6-way adjustable seat and Hydrostatic power steering, both standard. Many options. Hydraulic powered clutch.

766 Tractor

Choice of two 6-cyl. engines, the 79.7 PTO hp, 291-cu. in. gas or 85.4 PTO hp, 360 cu. in. diesel. Both have outstanding fuel economy. Choose the Torque Amplifier option and you'll have 16 forward, 8 reverse speeds. Lets you keep PTO speed up while reducing ground speed. The 766 has all the 66 Series comfort for reduced noise and 6-way adjustable seat. Safety cab installs easily on the 766. Hydraulic clutch also available.

666 Tractor

Popular tractor with choice of two engines, a 312 cu. in. direct injection diesel, or a 291 cu. in. gas engine, both with 66.3 PTO hp. Has Dyna-Life clutch that dissipates heat better than fiber-type clutches, lasts longer. Hydrostatic power steering is standard. Isomount isolators soften noise and vibration. Extra-strength front axles. Accurate gauges, not warning lights, keep you posted on engine functions at a glance. Safety cab a popular option.



966 Tractor



766 Tractor



666 Tractor

New 66 series cab

Rollover protection, plus
living room comfort year-round



Remember the bad old days—when field work too often was hot and dusty, or damp, or downright freezing cold? Cabs changed all that. But some cabs added a few irritations of their own—like excessive noise inside, for example. Well, now you can forget those shortcomings—if you have a new 66 Series cab on your tractor.

It swallows noise

One of the quietest cabs on the market. Total design concept centers on eliminating or softening noise. Each cab connection is shielded with an Isomount isolator (see illustration at left), specially designed rubber mountings that eliminate metal-to-metal contact noise and accompanying vibration. Plus, the cab is tightly sealed, insulated and weather stripped with padding and gaskets to keep out undesirable elements. Even the comfortable padded seat cushion is designed to absorb sound.

Convenient controls

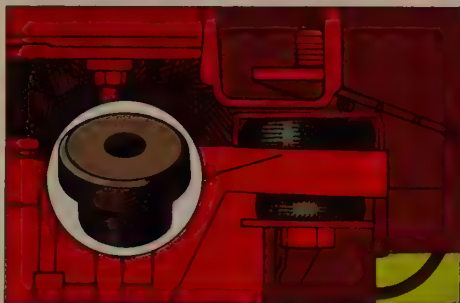
The padded overhead control panel, besides helping deaden noise, puts all controls at your fingertips. Options include heater-defroster and air conditioner with recirculating air system, AM or AM-FM radio, even an 8-track stereo system.

Gives protection

Built-in protective safety frame meets latest federal safety standards. Both standard six-way adjustable seat and optional hydraulically adjusted seat equipped with seat belts. There's great visibility in these cabs, too. Over 40 sq. ft. of tinted safety glass.

Still more features

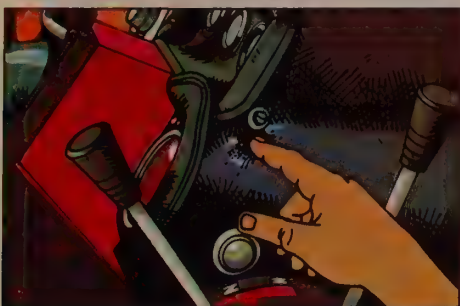
Standard equipment includes two inside rear view mirrors, turn signals, windshield wiper, courtesy light, ash tray and wide mounting steps with handholds. Pressurizer keeps dust out, brings fresh filtered air inside.



ISOMOUNT isolators keep cab noise to a minimum



Cab controls are easy to reach, easy to work



Heavy padding in cab keeps noise, dust down



Hydraulic seat is the ultimate in comfort



Tractors

hydrostatic drive

No clutch, shift without stopping—
with plenty of power at all speeds



Hydro 100



Hydro 70

International's exclusive Hydrostatic Drive truly adds a new dimension to tractor efficiency. Not only do you shift on-the-go, without clutching, but you have full control of power to drawbar, PTO and hydraulics. In effect, you "fine-tune" exactly the ground speed plus PTO speed you need to operate machines at peak efficiency. And it doesn't take a maze of switches and controls to keep Hydro operating. Just one lever—the Speed Ratio (SR) control—handles everything, (see illustration at right). When you move the SR lever forward, you go forward. The further you move it, the faster you go. To stop, you pull the SR lever back to zero and you stop—smoothly and safely. To back up, you move the lever to reverse ratio and choose any reverse ground speed you want. All the while you have full PTO, drawbar and hydraulic power.

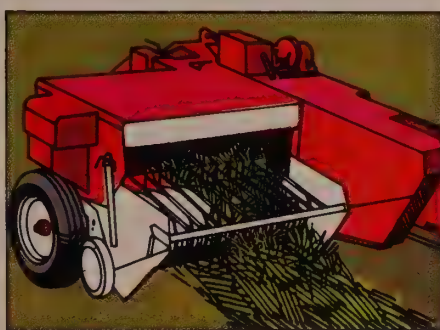
New Hydro 100

Most powerful of the exclusive IH Hydrostatic Drive models. Develops 103 PTO hp from 436 cu. in. diesel engine. Pull planters, balers, forage choppers and other implements with just the speed you want when you want it. And by precise matching of tractor speed to working conditions, you often get more work per gallon of fuel.

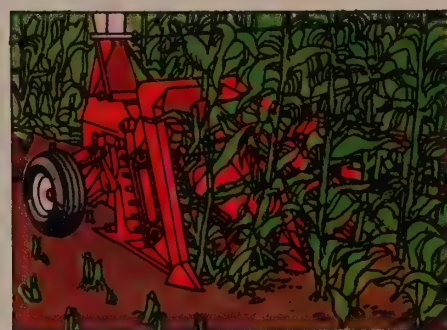
Hydro 70

The mid-size Hydro model. Choose from 69.5 PTO hp diesel or 69.6 PTO hp gasoline engine. Only with Hydrostatic Drive can you change speeds, under load, with just one lever. Even with almost-zero ground speed you can apply full engine power to PTO, drawbar or hydraulics. The Hydro is a very durable and reliable transmission.

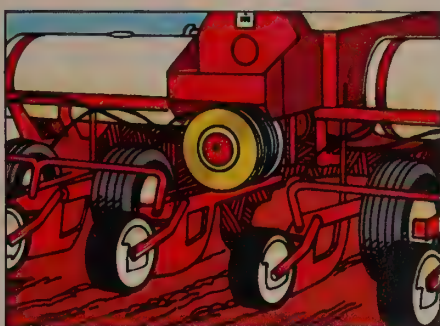
Get more work for less fuel with Hydrostatic Drive



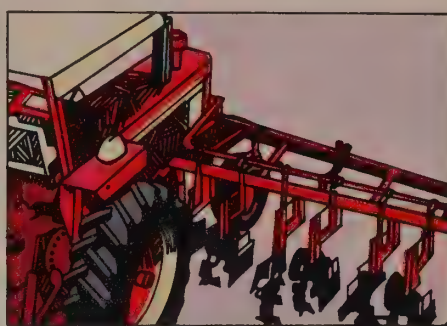
Run at speed which keeps pickup filled to capacity. You'll kick out substantially more bales per hour.



Slow up in heavy chopping, speed up in lighter chopping, but still keep PTO, engine speed at optimum rate.



Set and maintain precise planting speeds for given populations. No fixed gear ratios, speeds to limit you.



Cultivate just as fast as field, crop and safety conditions allow. As with planting, you control work speed.



Ideal for loading because of instant forward/reverse. Hold full hydraulic power at all forward/reverse speeds.



Tractors

4-wheel drive

Tremendous work capacity—like having another man and tractor



4366 Turbo

With dependable labor about as scarce as penny postcards, it makes sense to let a 4-wheel drive tractor and matching equipment replace the extra man you can't hire anymore. Advantages for 4-wheel tractors include better traction, better flotation, faster operation and more efficient use of power. Here's the story on our 4-wheel giants:

4366 Turbo

With this 225 max. hp engine (168.9 drawbar hp) 4-wheel articulated steering model, you're equipped for the toughest of tillage jobs. Massive 466 cu. in. turbo engine really turns on the power—without throwing out excessive smoke. Handles like a much smaller tractor. Turns in a 15-ft. radius. Front and rear frames oscillate in either direction to keep tires in contact with ground in rough terrain. Constant mesh transmission has 10 forward, 2 reverse speeds. Big range of options.



4166 Turbo

4166 Turbo

Precision built 436 cu. in. turbo engine delivers 150.6 PTO hp—with minimum noise and smoke. Exclusive IH piston design allows more efficient use of fuel. Delivers high torque rise over broad range of rpms—that means it's a workhorse in high speed, hard-pull tillage. When not under load, the 4166 carries $\frac{2}{3}$ of its weight on the front axle. Under load, weight transfers to the rear axle as well. Result is equal weight distribution for unmatched traction and flotation. That's why the 4166 can outwork conventional tractors—also crawlers—and at faster speeds. Switch from 2 to 4-wheel steering, without stopping. Inside turning radius, with 4-wheel steering, is $13\frac{1}{2}$ ft.; 22 ft. for front wheel steering. Has all the great IH comfort and convenience features.

utility tractors

Compact, but the big jobs they tackle will amaze you

674 Tractor

A compact tractor with power to handle primary tillage as well as general utility work. Diesel engine develops 61.5 PTO hp, gas engine 58.5 PTO hp. Synchronized "Lightning Flash" transmission allows shifting gears up or down without stopping. Great with a loader or rear-mounted blade. Four fully synchronized gears in high, low range and in reverse—a total of 8 forward speeds and 4 reverse. Category II 3-point hitch and 13 gpm hydraulic system let you take full advantage of high torque engine power. Comfortable torsion bar seat adjusts to operator's weight, leg length. Dyna-Life clutch lasts up to five times longer than ordinary fiber clutch facings. Hydraulically-actuated disc brakes run in oil.



674 Tractor

574 Tractor

A 52.9 PTO hp gasoline or 52.5 PTO hp diesel tractor that's got the power to handle plowing, disking, 4-row cultivating, also mowing and baling. "Lightning Flash" shift, plus shuttle lever, for 8 speeds forward, 4 reverse. Shift smoothly on-the-go at any speed. Draft control lets you make better use of tractor power, do a better job of tilling. Has most other features of 674 model.



574 Tractor

464 Tractor

A 44.4 PTO hp diesel tractor or 45.7 PTO hp gasoline tractor. Has low profile and short turning radius. Hydrostatic power steering and hydraulic disc brakes assure easy handling and maneuverability, even with a loader up front. Has outstanding International "Lightning Flash" shift, 8 speeds forward and 4 reverse. Power-actuated and fully independent PTO. Category I 3-point hitch. Has most comfort and convenience features of 574 and 674 models.

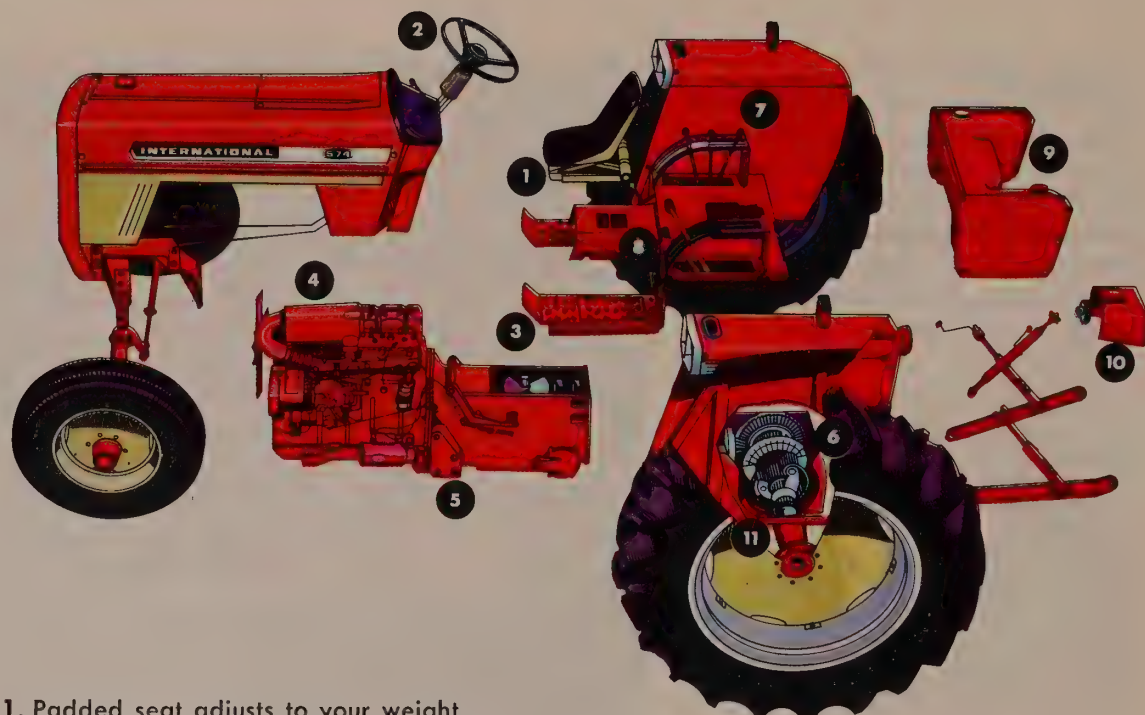


464 Tractor



Tractors

utility tractor features



1. Padded seat adjusts to your weight
2. Hydrostatic power steering—less fatigue
3. Clean design, convenient controls
4. Rugged diesel engines with quick torque rise; economical gas engines
5. Dyna-Life clutch lasts much longer
6. Hydraulic brakes operate in oil—run cooler for longer life

7. Dual-pump hydraulic system
8. "Lightning Flash" synchromesh transmission lets you shift on-the-go
9. Rear fuel tank for safety, traction
10. Independent power-actuated PTO
11. Compact planetary spur gear units for maximum gear reduction, ground clearance



140 Tractor

140 Tractor

Low-gear ground speed of less than 1.3 mph makes the offset Culti-Vision 140 ideal for close cultivation jobs. No blind spot above the row. You see the ground rigs on both sides of a single row—control them precisely horizontally and vertically. Has 8 ½-ft. turning radius. And there's plenty of power for specialty work—23.7 PTO hp. Has 4 forward speeds, one reverse. Crop clearance is 22 inches on the standard model, 27 inches in the high clearance 140. Select the precise working depth you want and hold it with touch-control hydraulics. Exclusive IH one-point fast-hitch (optional) allows almost instant hookup, release of implements:

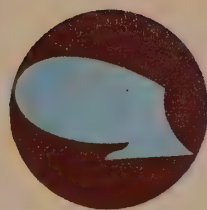
COMPARE THESE IH TRACTOR SPECIFICATIONS

MODEL NO.	HORSEPOWER (PTO)	PISTON DISPLACEMENT (CU. IN.)	CLUTCH DIAMETER	GEAR SELECTIONS	BRAKE TYPE	HITCH	PTO SPEEDS	
1468	145 hp*	550 diesel turbo	14-inch	8/4 16/8 Torque Amplifier	hydraulic	3-point Cat. II and III	1,000	"66 SERIES"
1466	145.7 hp*	436 diesel turbo	14-inch	8/4 16/8 Torque Amplifier	hydraulic	3-point Cat. II and III	1,000	
1066	125.6 hp*	414 diesel turbo	14-inch	8/4 16/8 Torque Amplifier	hydraulic	3-point Cat. II and III	540 and 1,000	
966	100.8 hp*	414 diesel	12-inch	8/4 16/8 Torque Amplifier	hydraulic	3-point Cat. II	540 and 1,000	
766	85.4 hp* 79.7 hp*	360 diesel 291 gasoline	12-inch	8/4 16/8 Torque Amplifier	hydraulic	3-point Cat. II	540 and 1,000	
666	66.3 hp* 66.3 hp*	312 diesel 291 gasoline	11-inch	5/1 10/2 Torque Amplifier	double disc	3-point Cat. II	540	
100	103 hp (est. max.)	436 diesel	—	Hydro	hydraulic	3-point Cat. II	540 and 1,000	HYDRO- STATIC
70	69.5 hp* 69.6 hp*	312 diesel 291 gasoline	—	Hydro	double disc	3-point Cat. II	540	
4366	225 engine hp (est. max.)	466 diesel turbo	14-inch (2 plate)	10/2	hydraulic	3-point Cat. II and III	—	4-WHEEL DRIVE
4166	150.6 hp*	436 diesel turbo	14-inch	8/4	hydraulic	3-point Cat. II and III	1,000	
674	61.5 hp* 58.5 hp*	239 diesel 200 gasoline	11-inch	8/4	(wet hydraulic) disc	3-point Cat. II	540	UTILITY TRACTORS
574	52.5 hp* 52.9 hp*	239 diesel 200 gasoline	11-inch	8/4	(wet hydraulic) disc	3-point Cat. II	540	
464	44.4 hp* 45.7 hp*	179 diesel 175 gasoline	11-inch	8/4	(wet hydraulic) disc	3-point Cat. I	540	
140	23.7 hp	123 gasoline	9-inch	4/1	—	1-point	540	

*Official Test



Match tillage implements to time available



tillage systems

No question about it. Primary tillage is one of your biggest power jobs of the year and may take more time than any other single task you do.

Determine your needs. Picking the right International Harvester plow and other tillage equipment isn't just a simple matter of hooking up to the largest outfit you can find. Tractor horsepower must be matched with tillage requirements, and the combination you choose can affect the performance of your entire farming operation.

The size tractor you have—or should have—depends a great deal on your particular soil conditions and the tillage system you select. Each region of the country has its own unique weather patterns, and different crops dictate special working conditions.

Consider land-preparation choices. A big, rugged IH power source can give you the capacity you need to handle more acres, double-up on tillage and planting in a once-over operation, use chisel plows, or group smaller implements into combinations you couldn't pull before.

Keep in mind you can boost field capacity both by using a bigger implement or by pulling a smaller implement faster. But putting together your tillage system and matching it with the right size tractor depends on a very important consideration: How many good working days do you have to get the job done?

Watch the weather. The answer to that question depends on the weather. You usually can find out how many good working days are available by checking past records of a local weather-reporting station. If those records aren't available, contact your county agent or state agricultural college. Better yet, keep your own.

The important thing is to get a good estimate of available working days and match them to the jobs that must be done. Then, by using the field work capacity tables in this guide, you can more accurately determine the size equipment needed to do the required work in the time available.

Do some figuring. For example, say you have 450 acres you want to plow and your best time to do this in your area would be between March 20-31. From past records, you know there are seven good plowing days during that particular time period.

Your equipment includes two tractors—one that pulls a 5-16" plow and the other a 4-14". Checking the field work capacity charts, you can see that at 4 mph, the 5-16" will plow 26 acres per 10-hour day and the 4-14" will plow 19 acres per 10-hour day. In seven working days, you could only plow 315 acres. That means it will take you three days longer to plow than you've allotted. Going to bigger International equipment can get the job completed on time.

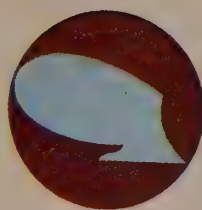
How much field work machinery will do (acres per hour)

Plow	width	Speed (mph.)		
		3	4	5
	8-18"	3.7	5.0	5.6
	6-16"	2.5	3.3	3.7
	5-18"	2.3	3.1	3.5
	5-16"	2.1	2.6	3.1
	4-14"	1.4	1.9	2.2
	3-14"	1.1	1.4	1.6

Chisel Plow	width	Speed (mph.)		
		3	4	5
	16'	5.4	7.0	8.7
	18'	5.9	7.9	9.8
	20'	6.5	8.7	10.9
	22'	7.2	9.6	12.1
	24'	7.9	10.5	13.0
	26'	8.5	11.3	14.0

Disk	width	Speed (mph.)		
		4	5	6
	10'	4.4	5.5	6.5
	12'	5.2	6.5	7.8
	14'	6.1	7.6	9.2
	16'	7.0	8.7	10.5
	18'	7.9	9.8	11.8
	21'	9.2	11.5	13.7

Figures from American Society of Agricultural Engineers' standards



plows

No plowing job's too tough
for these tools to tackle



420 Mounted Plow



510 Semi-Mounted Plow



710 Semi-Mounted Plow

Clearance, rugged construction, low draft per bottom, convenience features—important factors to consider before buying your next plow. Read about our all-star lineup—mounted, semi-mounted, trailing and two-way—then stop by your IH dealer's for an in-person look. We think you'll like what you see.

420 Mounted Plow

A mounted plow with extraordinary strength and rigidity. Spring-loaded rear furrow wheel (standard equipment) hugs the bottom of the furrow. Fast, simple bolt adjustment regulates width of cut or landing. Plow couples close to tractor, making it easy to lift and transport. Choice of 14 or 16-inch bottoms for 2, 3 and 4-furrow plows; 16-inch only for the 5-bottom plow.

440 Mounted Plow

Match this plow with your big tractor. Plow a foot deep with 16-inch bottoms. Ample 27-inch vertical clearance. Adjustable spring-trip beams. Spring-loaded rear furrow wheel. Comes in 3, 4 and 5-bottom sizes.

450 Mounted Plow

Rocks and stumps won't stop the 450, the strongest IH mounted plow ever built. Has a brawny 5 1/2 x 5 1/2-inch box-section backbone. Automatic beams ride over rocks and stumps, reset instantly. Strong enough for 12-inch deep plowing—with either the 3 or 4-bottom size plow. Full 30 inches of vertical clearance.

215 Mounted Plow

A 2-bottom plow for Farmall 140 tractor. Fast-hitch allows the plow to "float" free of the tractor, up and down, also side to side. Furrows stay uniform in width and depth. Has 24-inch vertical clearance. Plow up to 10 inches deep. Spring-trip beams swing free when bottoms hit obstacle.

510 Semi-Mounted Plow

Handles great. Has pivoting hitch and automatic tail wheel steering. Penetrates fast because you drop the front end first. Comes out of ground the same way. Choose from 3 bottoms up to 6. All have spring-trip beams. 27-inch vertical clearance.

710 Semi-Mounted Plow

The big one among semi-mounted plows. Even at 10 inches plowing depth, you will still have 18 inches of vertical clearance. Independent hydraulic control of front and rear. Choose from 3, up to 8-bottom sizes, with automatic or spring-trip beams.

Automatic beams

If you're breaking shares or bending beams, you'll appreciate this exclusive patented IH feature. Drawings at right show how the automatic beams work. In the top row of drawings, note how the plow share eases up and over a sloping rock or obstruction, then returns to normal plow depth immediately. No harm done—not even if the plow bottom butts up against something it can't ride up and over. When that happens, the bottom simply swings back and up—14" above the bottom of the furrow. And then the bottom snaps back to its pre-set depth. No need to even slow down, let alone stop.

770 Trailing Plow

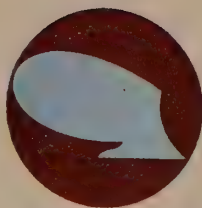
A rugged plow, equipped with automatic-trip beams, that glides through the toughest soils. Drawbar reverses. Run tractor on land or in furrow. Control lift and depth with one hydraulic cylinder. Automotive type wheel for transport convenience. Five or 6-bottom sizes . . . 16-inch bottoms. Economical tandem hitch available.



Automatic beams



770 Trailing Plow



Tillage Systems

plows

Rugged, fast, easy operating
for nonstop tillage operations



700 Trailing Plow

700 Trailing Plow

Full casting front furrow and tail wheels make the 700 a snap to handle. Available in 7 and 8 bottom sizes, extendable to 8 and 9 bottoms. Seven and 8 bottom spring or automatic trip; 8 and 9 bottom automatic trip.

140 Two-Way Plow

This plow lets you turn all furrows the same direction, eliminates ridges and dead furrows, minimizes runoff and erosion. You reduce soil compaction by not traveling across headlands. Single action cylinder rotates bottoms. Choice of rigid or spring-trip beams, either 3 or 4-bottom sizes.



140 Two-Way Plow (in-furrow hitch)

155 Two-Way Plow

Plow down to 14 inches in heavy trash. Big 30-inch vertical clearance. Choice of rigid or spring-trip beams. Automotive-type gauge wheel. Five-furrow plow has 16-inch bottoms; four-furrow, 18-inch bottoms. Two-way cylinder gives fast rollover of bottoms.

642 Two-Way Plow

Designed to work with medium horsepower tractors. Plow deep with this rugged 642. It's available in mounted 3-furrow size. Quick rollover, no lost times on headlands. Automotive-type gauge wheel.

Super Chief Bottoms

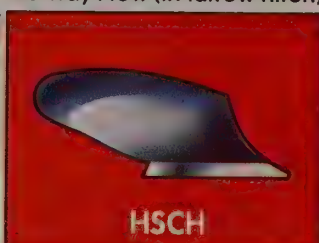
Note at left the choice of 5 bottoms for IH plows. **High-speed (HSCX and HSCX-R) bottoms** are ideal for sod or stalks. **Sod, stalks and stubble (HSCG) bottom** is suited to sticky soils. Scours well. **General purpose (HSCH) bottom** works well in variety of soils. **Slat (HSCS) bottom** is top choice for extra sticky, hard-scouring soils. **HI high-speed (TF) bottom** is for high-speed plowing up to 6 mph. Circular drawing shows soft center of bottom which acts as shock absorber for added toughness.



HSCX



HSCG



HSCH



TF



HSCS

vibra shank cultivators

Exclusive vibrating action
levels seedbed, rips out weeds

Seedbed preparation, secondary tillage, summer fallowing.—Vibra Shank is the ideal tool for all three. Spring loaded vertical shanks vibrate fast—independently—to tear out weeds, thoroughly mix trash with soil. Works 3 to 7 inches deep.

45 Trailing Wing Type

Basic 22 ½ and 31 ½-ft. sizes. Stub and welded "C" frame extensions can be added to increase width to 37 ½ feet. Optional remote hydraulic cylinders control depth, and can be operated together or separately. Well-balanced wheel positions allow uniform cultivation and smooth trailing. Wings are operated by two double-acting remote cylinders (optional) and fold on sturdy malleable iron hinges. Positive lock-up of wings assures safe transport.

45 Trailing

Comes in 8 ½-ft. and 12 ½-ft. basic sizes. Stub and welded "C" frame extensions increase the 8 ½-ft. size to 11 ½-ft. in one foot increments and the 12 ½-ft. to an 18 ½-foot unit. Wide-track wheels are single-arm mounted on tapered roller bearings. This means less hardware underneath and more open space for trash clearance.

45 Mounted

Basic sizes are 8 ½-ft. and 12 ½-ft. Select the width to match your present tractor power, then add to it when you buy a larger tractor—without having to buy a new cultivator. Stub extensions fold down within the basic 12 ½-ft. frame, no shank overhang.

IMPLEMENT	MODELS	SIZES	AVERAGE WORKING DEPTH* AND USE
SPRING-TOOTH HARROW 	345 mounted 360 trailing 401 trailing	16' to 21' 24' to 32' 8' to 16'	1 to 5 inches Seedbed preparation Light secondary tillage
45 VIBRA SHANK CULTIVATOR 	Mounted Trailing Trailing wing	8'6" to 19'4" 8'6" to 19'4" 22'6" to 37'6"	3 to 7 inches Summer fallow Seedbed preparation Secondary tillage
645 VIBRA CHISEL 	Mounted Trailing Trailing wing	9' to 15'9" 13'6" to 20' 17' to 27'	4 to 9 inches Once over seedbed preparation (soybean ground) Heavy secondary tillage Most primary tillage
55 CHISEL PLOW 	Mounted Trailing Trailing-single wing Trailing wing	7' to 17' 7' to 17' 16' to 20' 22' to 35'	6 to 12 inches Heavy secondary tillage Primary tillage Light subsoiling
10 SUBSOIL CHISEL 	Mounted	8'3" to 15'4"	11 to 26 inches Primary tillage Deep tillage Subsoiling

Specifications subject to change without notice.

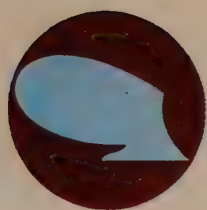
*Depending on soil conditions



45 Trailing Wing Type



45 Mounted



Tillage Systems

chisels

No soil too hard or rocky
for these rugged chisels

For heavy, primary or secondary tillage jobs, in soils where you need to do more than just scratch the surface, the IH line of chisels dig in and do the job right.

55 Chisel

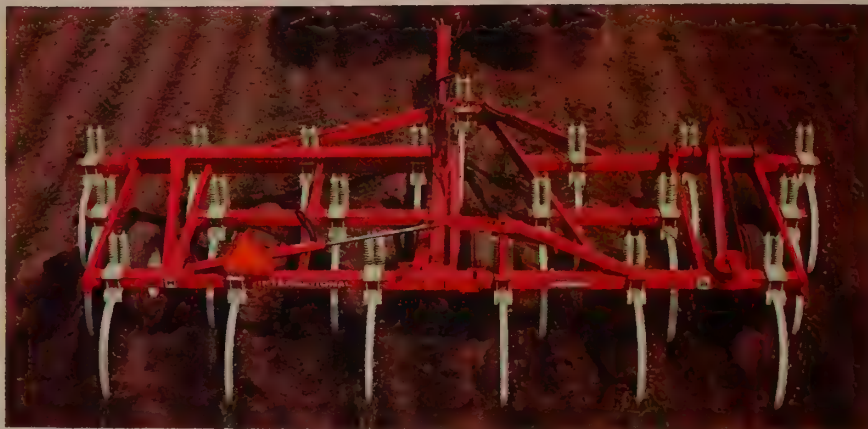
Use the 55 for heavy or primary tillage and light subsoiling. Rugged steel alloy shanks flex continuously to shatter tough soils to depths of 6 to 12 inches. Choose from four models: single wing trailing, mounted, trailing and trailing wing. The single wing trailing model has an anti-hump device that prevents frame humping at the center hinge—maintains uniform depth—an IH exclusive. Several sizes available of each model. Smallest is the 9-ft. mounted. Largest is the 31-ft. trailing wing, which stretches to 35-ft. when extensions are added.

10 Subsoil Chisel

Breaks up plow pan for better water and root penetration, improved drainage. Has extra strong V-shaped frame, reversible shank points for double life. Comes in 7, 10 1/2 and 14-ft. sizes.

645 Vibra Chisels

The 645 chisels fit into the IH line right between the 45 Vibra Shank cultivator and the 55 chisel plow. Available in trailing wing, mounted and trailing types. Each model has exclusive Vibra Shank action, ample 24-in. clearance and durable 1 3/4 x 1 3/4-inch shanks. Mulcher attachment for all three 645 models aids tillage in tough soils. Sizes vary with model. Smallest is mounted type at 9 ft. Largest is trailing-wing type that extends to 27 ft. with extensions.



55 Chisel



10 Subsoil Chisel



645 Vibra Chisels

harrow

Simple tools, yet so important
for successful seedbeds



360 Trailing Wing Type



315 Packer Mulcher

If you doubt the worth of a harrow preparing level seedbeds, breaking up crusted soils, readying summer fallow or mulching stubble, better take another look—this time at the complete line of IH heavy-duty harrows.

360 Trailing Wing Type

Cover up to 32 feet on each pass with this rugged harrow. Heavy 2 1/2-inch square tubular frame. Adjustable wheels regulate working depth to 5 inches. Lifts fast on turns. Teeth spaced 6 inches apart on 2-bar frame. (3-bar frame also available.) Quickly folds to 13 feet, 5 inches for easy transport.

345 Fully-Mounted

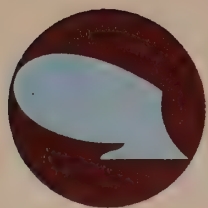
High capacity at an economical price. Works down to 12 in., at speeds up to 6 mph. Ideal behind big-horsepower tractors. Hinged wing sections allow even penetration across full width of the harrow. Also, the spring-loaded flexible hitch mast keeps 345 following contour of the ground, independent of tractor. S-shaped 7/16-in. spring steel teeth penetrate fast, dig deep. High 17 1/2-in. clearance. Standard tooth spacing 6-in., but can go to 4 1/2-in. with more teeth.

401 Trailing

Four types of teeth available for the 401. Independent sections, each with two runners, are mounted individually to a tubular drawbar with chain linkage. Choose 8, 10, 12 or 16-ft. size with hydraulic, power set or manual control.

315 Packer Mulcher

One pass turns plowed ground into a firm, ready-to-plant seedbed. Crushes both surface and buried clods. Features hydraulically controlled spring teeth; spring-loaded, self-leveling hitch. Three sizes: 12-ft., 4-in.; 13-ft., 8-in. and 15-ft.



disk harrows

Heavyweights that slice through stalks and stubble with ease



760 Offset Disk Harrow



770 Offset Disk Harrow



470 Wing-Type Disk Harrow

Buy an IH disk harrow and you've got a piece of equipment with the heft and muscle to slice through heavy ground cover plus bite deep into hard, compacted soil. On every model you'll find features that separate them from other disk harrows on the market. For instance, all models have a heavy steel sleeve on which the gang bearings are mounted. This sleeve gives our disk harrows more load-bearing surface than any disks in their class.

750 Offset Disk Harrow

Comes in 6 $\frac{3}{4}$ to 10 $\frac{1}{2}$ -ft. sizes. Gives good offset disk harrowing—for small to medium sized tractors. 22 and 24-inch blades.

760 Offset Disk Harrow

New to the IH line, the 760 comes in 12, 14, 18 and 20-ft. sizes. Approximately 325 lbs. of weight per foot of cut assures fast, even penetration. Work down to 7 inches with 22 or 24-inch blades.

770 Offset Disk Harrow

Also brand new to the IH line. Massive steel frame provides more weight per foot of cut. Slice into tough soils up to 10 inches. Choose 24 or 26-inch solid or notched blades. Dial hitch lets you easily center the disk behind your tractor. Angle between gangs adjustable from 15 to 23 degrees, and rear gang moves laterally. Dual transport wheels. Two non-folding models and one wing-type in sizes from 13-ft., 9-in. to 23-ft., 9-in.

470 Wing-Type Disk Harrow

Lots of first-class features, but economical price. Widths from 11 $\frac{1}{2}$ -ft. to 21-ft. and 7 $\frac{1}{2}$ or 9-in. blade spacing. Disk deeper by folding gangs over main frame for more weight. Exclusive spring-cushioned, self-leveling hitch.

780 Offset Disk Harrow

Plowing type disk harrow. Heaviest, toughest model in the IH line. Tremendous 710 lbs. of weight per foot of cut. Available in 12, 14, and 16-ft. sizes, the 780 has unexcelled penetrating power plus outstanding features of 770 series. Choice of big 28, 30 or 32-inch blades.

490 Wing-Type Disk Harrow

Disk 24-ft., 7-in. to field-gulping 32 feet wide with this big harrow. Each wing has its own gauge wheels, allowing wings to float for even penetration. Has spring-cushioned, self-leveling hitch.

370 Disk Harrow

A favorite in its class. Over 200 lbs. per foot of cut. Torsion frame keeps gangs in soil, yet flexes to follow ground contour. Easy and quick to adjust. Sizes from 7-ft., 11-in. to 13-ft., 10-in. Spring-cushion hitch.

122 Mounted Disk Harrow

Maneuvers easily in tight spots. Has folding frame. Quick gang adjustment. Lifts for easy transport. Fast-Hitch or 3-point. Sizes range from 5½-ft. to 7-ft., 11-in.

132 Mounted Disk Harrow

Exclusive IH design lets you front and rear gangs together or separately. Torsion frame keeps gangs in working position. Five sizes from 9-ft., 1-in. to 12-ft.



490 Wing-Type Disk Harrow



370 Disk Harrow



122 Mounted Disk Harrow



Size your machinery to beat the weather



crop production systems

If the last couple of planting seasons have been any indication, you know that getting your crops planted on time can be one of the toughest and most frustrating jobs in your farming operation.

Timeliness is the key. That's why you'll want to take a serious look at your machinery requirements. Do you have large enough equipment to get planting done when time is at a premium? And are you equipped to handle a late spring or a stretch of wet weather? Regardless of the crop or the part of the country you live in, you know from your own experience that the date you get your crops planted can make a big difference in the results of your cropping program. For example, in parts of the Cornbelt, corn planted the first week of the planting season often will yield 35 bushels an acre more than corn planted the last day of the season. **Match machinery to acreage.** That's no revelation to most crop producers. But sometimes it's easy to overlook just how much your machinery system will be affected by a moderate increase in acreage. Say for example, last year you grew 450 acres of corn. And this year, you plan to enlarge your corn acreage by 160 acres. If you don't get another wet spring like you had last year, you think your present 6-row planter can handle the job. But you decide you'd better do some pencil pushing just to be on the safe side.

Checking past weather records, you have averaged six good planting days during the optimum planting period. Looking at the table below, you know you can plant about 61 acres in 30-inch rows per 12-hour day—if you plant at your usual average of 4 mph. At that rate, in six days you'll cover about 366 acres. That means with your present equipment and management, you'll be short four good days to tackle the job. And that means you'll have to make some changes in your machinery management practices. That's where IH can help.

Consider bigger machinery. For example, university research has shown that using bigger machinery to get your corn planted in 6 to 8 good working days usually is more profitable than a system that requires more than 12 working days to complete the job.

Speed up planting. In addition to increasing the size of your equipment, you may want to consider planting faster. That's why you'll want to take a good look at the International Cyclo planter with its large capacity seed hopper, its precision planting ability without plates—and its ability to handle sized or unsized seeds. Also take another look at planter options, such as fertilizer and chemical attachments. You can design a tailor-made rig to speed spring work. And IH's special combined tillage hitch will allow you to double up tillage and planting.

How much field work crop
production equipment will do
(acres per hour)

Planter	width	Speed (mph.)		
		4	5	6
8-30"	6.3	7.9	9.4	
8-20"	4.5	5.7	6.5	
6-30"	5.1	6.4	7.6	
4-40"	4.5	5.7	6.8	
3-30"	2.5	3.2	3.8	
2-40"	2.3	2.8	3.4	

Sprayer	width	Speed (mph.)		
		4	5	6
40'	16.0	20.0	24.0	
30'	12.0	15.0	18.0	
25'	10.0	12.5	15.0	
20'	8.0	10.0	12.0	
15'	6.0	7.5	9.0	

Cultivator	width	Speed (mph.)		
		4	6	8
8-30"	6.3	9.4	12.6	
8-20"	4.5	6.8	9.0	
6-30"	5.1	7.6	10.2	
4-40"	4.5	6.8	9.0	
3-30"	2.5	3.8	5.0	
2-40"	2.3	3.4	4.6	

Figures from American Society of Agricultural Engineers' standards



Cyclo planter

No matter what you're planting with now, you haven't planted until you've planted with a Cyclo planter

A revolutionary, years-ahead concept in planters—yet incredibly simple in that it operates on air power. No gadgets to go haywire. Plant corn, soybeans, sorghum, other crops, and get plant population that's more accurate than you could ever hope with a conventional planter. Only three moving parts: A blower to supply air pressure; a revolving drum with perforated seed pockets; and rubber seed-release wheels. Switch from corn to bean planting, for example, in just minutes. All you do is take off the stainless-steel seed drum and attach another. For years to come, you'll see the Cyclo planter setting the standard.

500 Cyclo Tool Bar-Mounted Planter

Couple air-planting efficiency with advantages of tool bar mounting. With the new tool bar-mounted planter, you've got more overall control—leave narrower headlands and plant odd-shaped plots more precisely, plus maneuver through tight spots. Take advantage not only of the tool bar features, but also of the Cyclo planter's features itself. One big centralized seed hopper (two on the 12-row model) holds 11 bushels—enough to plant half a day without stopping to refill. Plant sized or unsized seed with equal ease and accuracy. Sprockets switch fast for changing plant populations. Rugged main frames are 5 x 7-inches for the 4, 6, and 8-row units, 7 x 7-inches for the 12-row. The International endwise transport system is standard on the 8-row wide and 12-row wide planters, optional on the 6-row wide and 8-row narrow. Choose from 2-point Fast-Hitch systems or 3-point hitches.



500 Cyclo Tool Bar-Mounted Planter



500 Cyclo Planter In Transport Position



400 Trailing Cyclo Planter



Electronic Planter Monitor



400 Cyclo Duplex Hitch Planter

400 Trailing Cyclo Planter

There are lots of trailing planters on the market, but there's only one Cyclo planter. All the great air power features of the 500 series, but in trailing rather than tool-bar models. Choose from 4, 6, and 8-row sizes in wide-row (34 to 40-in.) or narrow-row (28 or 30-in.) models. Duplex hitch attachment lets you handle two 4 or 6-row planters. The 400 has more planting rate settings than any other planter, and features quick-change settings. Herbicide and insecticide applicators hold rate constant once you set the micrometer dial.

Cou-Till Attachment

Minimum tillage attachment for planting in sod, stubble or other conditions in which erosion may be a problem. Consists of frame-mounted tool bar and spring-loaded coulters that cut through trash and penetrate the soil. Leaves a narrow trench directly ahead of seed openers. For 4-row wide and 6-row narrow planters. 400 model only.

Electronic Planter Monitors

Rely on International Planter Monitors, designed exclusively for 4, 6, and 8-row Cyclo planters—and conventional IH planters—to take the guesswork and worry out of planting. Digital readout Cyclometer automatically scans each row. An alarm sounds when trouble occurs, and the row number appears in the control monitor window. Console unit installs on tractor fender or hood, runs off tractor's 12V battery. Seed drum monitor tells at a glance whether drum is rotating.

Duplex Hitch

Hook up two 4-row or two 6-row planters side-by-side and keep them in perfect alignment. Self-contained hydraulic system operates blower independent of tractor.



planter units

Build a custom planter with these versatile units



326 Planter Carrier

326 Planter Carrier

Start with a 326 carrier, adaptable to flat land, bed and skip row planting, then add either 295 or 296 planter units. Options are many: Four frames from 238 in. to 307 in. on which you can put 6 to 12 planter units. Husky 5x7 in. tubular steel frame is free of welds or gussets. Has 14-in. adjustable carrying wheels. Endwise transport wheels standard on 307-in. bar, optional on others. Fast-Hitch or 3-point.

295 Planter Unit

Handles planting equipment for cotton, corn, beans and beets, and rotary cone equipment for peanuts and other large seeds. Use on 1 3/4, 2, 2 1/4 and 2 1/2 in. tool bars or on 326 Planter Carrier. Plants as close as 14 in. Big 13 1/2 in. double-disk openers.

296 Planter Unit

For the 326 carrier or a 2 1/4 or 2 1/2 in. tool bar. Push units close together for rows as narrow as 20 in. Takes cotton, corn bottoms, plus rotary cone for peanuts and other large seeds. Press wheel drive runner or double-disk (stubble mulch type) openers. Comes in rotary hilldrop or straight drill planter models.

82 Middlebuster

Choice of 5 through 9 rows. Super-tough main frame. Front-mounted gauge wheels with turnbuckle adjustment. Regular or high-clear beams. Fast-Hitch or 3-point.

25A Tool Bar Carrier

Designed for tractors with Category I 3-point hitch. Carries a single 2 1/4 or 2 1/2 in. square bar. Tie bars available for attaching secondary bar.

27 Tool Bar Carrier

Fast-Hitch units for double-tool bar operation with either 2 1/4 or 2 1/2 in. square bars.



296 Planter Unit



295 Planter Unit

listers

Plant with air, either in old rows or mulched ground

28 Tool Bar Carrier

Similar to the 27 Carrier. Designed for Category II 3-point hitch.

92 Series Cyclo Lister

If you're in an area where lister planting is popular, now you can have a lister equipped with International's revolutionary Cyclo air planting system. (See p. 30 for a rundown on how the Cyclo operates.) Plant to a precise population. Fill the 92's big 11-bushel seed hopper and plant half a day before refilling. High-strength main frame measures 5 x 7 in. or 6 x 8 in., depending on model size. Front-mounted gauge wheel drives with turnbuckle adjustment.

Choose from 5 models

The 92 Series includes wide (36 to 40 in.) and narrow (30 in.) models. The lineup: 4-row wide, 6-row wide, 6-row narrow, 8-row wide and 8-row narrow. International endwise transport system standard on the 8-row wide model.

82 Series Listers

Choose from 6 models. Features heavy-duty 11-inch disk covers, fixed angle rotary moldboards and front-mounted gauge wheels with turnbuckle adjustment. Model lineup: 4-row, 36 to 40-in. rows; 4-row Till Planter, 36 to 40-in. rows; 6-row, 36 to 40-in. rows; 6-row Till Planter, 36 to 40-in. rows; 8-row, 30-in. rows; and 8-row, 36 to 40-in. rows. Fast-Hitch or 3-point hitch.

No. 108 and 109 Lister Units

The 108 unit is made specifically for cotton planting; the 109 for corn. Both units mount in multiples on 2 1/4 or 2 1/2-in. square rear-mounted tool bars. Each has its own gauge wheel drive.



92 Series Cyclo Lister



82 Series Lister



grain drills

Drills with unmatched feed cup engineering

620 Grain Drills

Critical parts of feed cups on all IH grain drills are molded of sintered metal—much easier to precision-mold than cast iron. Result is closer fitting, more uniform parts that wear better and last longer. New 28 x 6 plain hopper holds 40.6 bushels. Front delivery double-disk openers gently put seed at point of maximum moisture, without scatter. This plain or combination drill comes in eight sizes: 14x6, 14x7, 16x6, 20x6, 24x6, 20x7, 24x7, 28x6 and 16x8 (single disk). Exclusive drop-bottom fertilizer hopper permits easy cleaning. No need to remove bottom plate. Better balance of tricycle fore-carriage wheels reduce soil compaction.

510 Trailing Drill

The 510 has all the class-by-itself features of the 620 model. Available in nine sizes with 6, 7, 8 and 10-in. spacings. Choose plain drill or combination. Newest 21x7 size plants six 28-in. rows. Tilt wheel models for irrigated land fit 40-in. beds.

510 Semi-Mounted Drill

This 13x7 plain or combination drill has many of the 620 features at a rock-bottom price. Close-coupling features make the 510 ideal for contoured fields.

150 Hillside Shovel Press Drill

This 8x18 press drill is ideal in soils where seedlings can pop through with ease. Built for seeding in heavy trash. "Eagle Beak" points penetrate deep.

150 Shovel Press Drill

Available in 8 sizes with many 620 model features. Openers staggered for better trash clearance, making 150 ideal for seeding in heavy trash. New high speed furrow openers feature slim line design, permit faster field travel, produce level seedbed.



510 Trailing Drill



150 Shovel Press Drill



620 Drill

cultivators

Cultivation equipment that never gives weeds a chance



Exclusive IH rotary hoe teeth (see illustration) enter the ground in a vertical position. And that means they penetrate fast. The spoon-shaped surface of each tooth "shovels" the soil, pulverizing it thoroughly. Teeth are self-sharpening. It's virtually impossible to bend one of these teeth because of the special curvature and extra-wide shank. Overlapping offset wheels work the soil every 2 1/2 inches.

300 Mounted Rotary Hoe

With 21 sizes of the 300 model hoe available, you're bound to find one just right for your operation. Operating widths range from 145 inches to 320 inches. Hoes up to 194 inches wide transport on tractor hitch, wider hoes transport endwise.

224 Fully-Flexible Rotary Hoe

Ideal for bedded or listed crops, the 224 tills both sides of the beds in single pass. Works great on flat land, too.

Models 3 and 4 Rotary Hoes

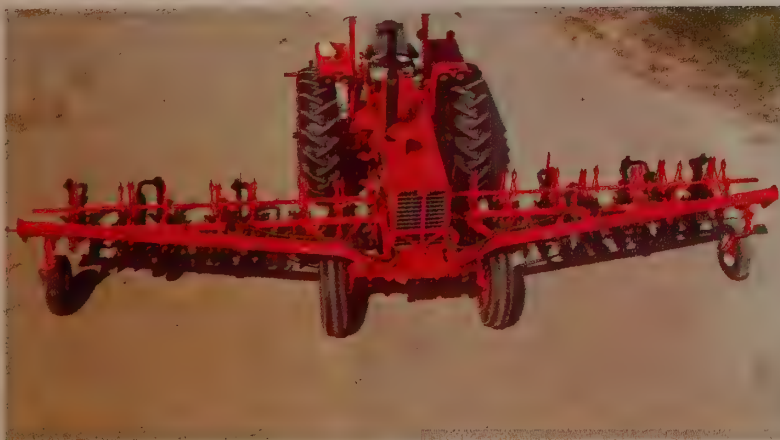
Equipped with standard-setting IH hoe wheels. Each section works independently. The No. 3 hoe, with 18-in. wheels, and the No. 4, with 21-in. wheels, come in 2, 3, 4 and 6-section trailing and 2, 3, and 4-section mounted models.

85 Series Front-Mounted Cultivator

Unlike some front-mounted cultivators, you hook up or detach this one in minutes, without effort, because it has swing-frame mountings. In the field, individually mounted parallel-link gangs follow the terrain, hold sweep pitch constant. Individual gauge wheels keep depth constant. Fits International 756, 766, 966, 1066, 1256, 1456 and 1466 tractors. Available in a 6 or 8-row model for 36, 38 and 40-in. rows, and in 8 or 12-row units for 28 and 30-in. rows.



300 Mounted Rotary Hoe



85 Series Front-Mounted Cultivator



cultivators



153 Vibra Shank Cultivator

78 Series

Other than swing-frame mounting, the 78 has every feature of the 85 Series cultivators, but comes in a 4-row model with 36, 38 and 40-in. row spacing, also a 6-row for 28 and 30-in. rows.

153 Vibra Shank Cultivator

Versatile rear-mounted cultivator. Use it as a high-speed crop cultivator, then reposition the spring-loaded vibrating shanks and convert it to a full-coverage cultivator for working stubble or disked ground ahead of the planter. Available in 4, 6, and 8-row, wide-row models. Also 6, 8 and 12-row, narrow-row.

353 Rotary Cultivator

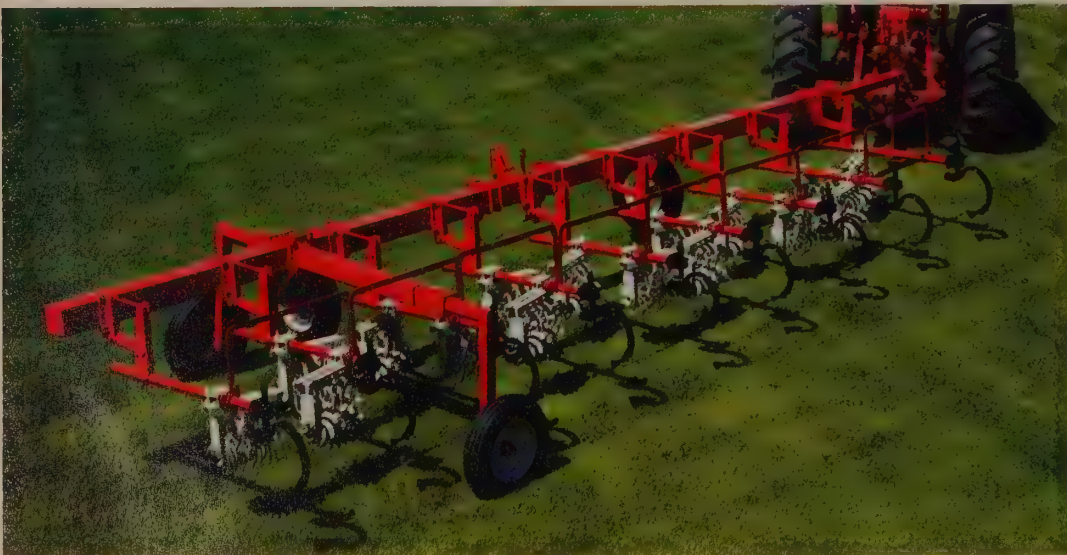
Work close and fast, get into the field earlier with this high-speed rotary cultivator. Trim-Ro weeder wheels work close to the plants. This low-priced unit, with one gang between the rows, is available in 4, 6, 8-row wide and 6 and 8-row narrow models. The 363 model has two gangs between the row and comes in 4 and 6-row wide models.

163 Cultivator

An ideal rear-mounted cultivator for sidehills and uneven terrain. Has two gangs between rows. Comes in 4, 6, and 8-row models.

153 Cultivator

A low-cost rear-mounted cultivator with lots of premium features. Designed so a single gang carries the cultivation equipment between row pairs, saving the cost of extra gangs and gauge wheels. Available in 4, 6, and 8-row, wide-row models, also 4, 6, 8 and 12-row, narrow-row models.



353 Rotary Cultivator

200 2-Row Cultivator

Maneuvers well because it's close-coupled. Rigid gangs, 28 to 42-in. row spacing. Choice of 2 1/4-in. square hollow or solid bar.

Lister Cultivators

Staggered shovels do an excellent job of cleaning out the row. Precise depth control with exclusive crank adjustment. 170 model available in 6-row wide and 6 and 8-row narrow models, each with 4 x 6-in. main frame. The 70 model is a 4-row, wide-row model.

144 Cultivator

A 1-row, front-mounted cultivator for Culti-Vision Cub and 140 tractors. Available in 36 to 40-in. row sizes for the Cub, 40 to 68-in. rows for the IH 140 tractor.

Hi-Clear Sprayers

Outstanding design. Weight distributed evenly on all 3 wheels. Better flotation, and more traction, too, because units have rear-wheel drive. Carry chemical loads of 2,000 lbs. or more without worry of structural damage. Main frame section is made of 12-in. deep channel steel. Steering ratio of 20 to 1 makes for easy pivot turns. Powered by reliable IH 4-cylinder tractor engine. Spray tank holds 220 gallons, has a 10-in. filler neck. Exclusive hydraulic bypass agitator mixes water and chemicals thoroughly. Has self-priming 70-gal. capacity centrifugal pump. Wide variety of attachments available.

660 Hi-Clear Sprayer

Designed for 38 to 42-in. rows without tread adjustment. Has 60-in. crop clearance for spraying.

780 Model

Similar to the 660, but has 68-in. crop clearance for spraying.



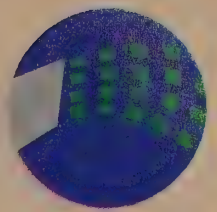
144 Cultivator



660 Hi-Clear Sprayer



Pick the system best-suited to your total operation



forage harvesting systems

Management is the key when it comes to making top quality corn silage or haylage. And you know that means harvesting at the proper moisture, right stage of maturity, choosing the right cut and getting your crop into safe storage fast.

Estimate length of harvest. Because length of harvest season affects both quantity and quality of your forage, you know it's essential to have a forage harvester that can do the job in the time available. That's why you'll want to keep tabs on actual harvesting days from year-to-year. It can be a big help in determining just how much time you have to get the job done.

Analyze labor situation. And if you're a dairyman with a limited labor supply and a sizeable number of chores, you'll want a system that doesn't require a lot of extra labor. For example, a Michigan State University study has shown that many dairymen with small labor forces may only have 6 hours or less each day to spend on in-the-field forage harvest.

Shoot for quality. You know that's the name of the game. As forage matures, its nutritive quality declines. And, as University of Minnesota research points out, it's better to be a little over-equipped on the machinery side and

get your crop out on time than suffer sizeable penalties because of delayed harvest, lost forage quality—and reduced livestock performance.

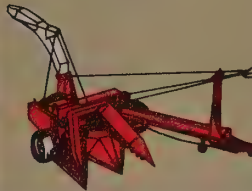
Think total system. Planning to increase the size of your livestock herd? Then, it might be a good idea to take another look at your whole operation. For example. Can your present forage harvesting system handle increased feeding demands? Will you have to add more labor? Do you have adequate crop land?

Match equipment. Then take another look to see if your equipment is properly sized. A mismatched forage system could easily result in bottlenecks. Just what size of forage machinery you'll need depends on your particular field topography, soil surface conditions, crop yields, frequency of wagon changes, transport distance, blower capacity and your own management ability. The tables below will help you determine how much time it will take to handle your forage harvest. Then, after giving some serious thought to your present and future equipment requirements, talk with your local IH dealer. He can help you choose the forage harvesting system that best fits your needs.

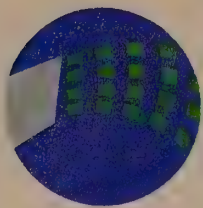
How much field work
forage equipment will do
(acres per hour)

Direct-cut forage harvester	width	Speed (mph.)		
		2	3	4
	7 1/2'	1.5	2.3	3.0

Pickup forage harvester	width	Speed (mph.)		
		2	3	4
	6'	1.2	1.8	2.4

Pull-type corn harvester	width	Speed (mph.)		
		2	3	4
	1-row, 30"	.4	.6	.8
	40"	.6	.8	1.1
2-row, narrow (30")	.8	1.3	1.7	
2-row, wide (40")	1.1	1.7	2.2	

Figures from American Society of Agricultural Engineers' standards



Forage Harvesting Systems

choppers

Exclusive features galore
in these precision machines



650 Forage Harvester

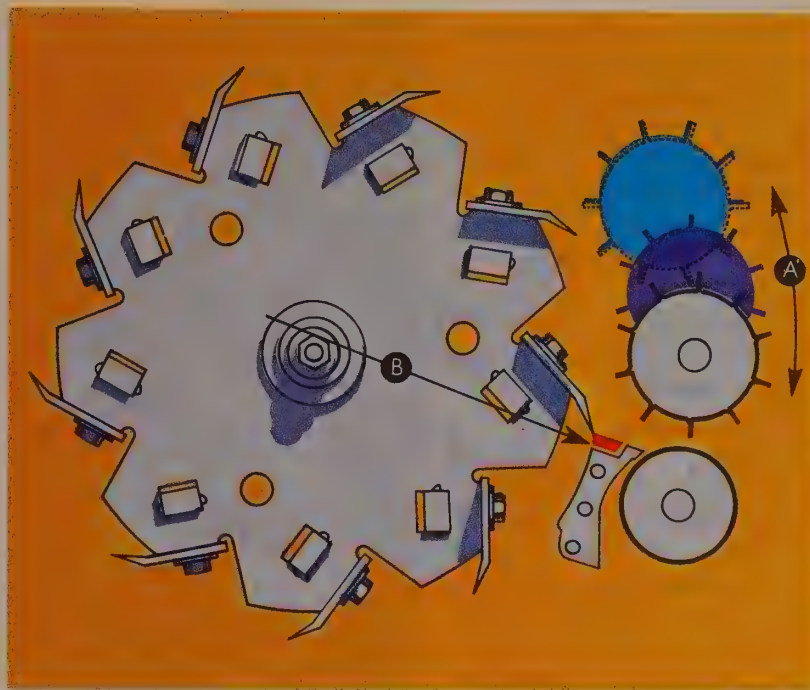
Drive through the countryside at the height of the forage harvesting season and you'll see IH forage harvesting equipment doing its stuff. Little wonder that when most farmers start looking for the ultimate in forage choppers, they look no longer once they see the IH champs in the field. You'll find features on the 650 and 555 choppers you won't find on any other machines being marketed today.

650 Forage Harvester

Analyze what you're looking for in a forage harvester, then take a checklist to your nearest IH dealer. It's a solid bet you'll find everything you want—whether you choose the recutter-blower model with the remarkably uniform cut or the direct-throw model—all in one machine—the IH 650. For starters, knives in the massive 9-blade cutter-head never need rebeveling. And their offset edge improves their cutting action, another reason why IH choppers are known for their fine, uniform chop. The swing-away cover exposes the cutterhead—a great help for faster, more convenient knife changing. The machine's hefty power train handles today's big-horsepower tractors. Crop units include one-row corn unit, wide and narrow 2-row corn units, cutterbar unit, and a 6-ft. hay pickup unit. Feed roll with outside drive and replaceable slats, and a gear change that allows $\frac{3}{16}$ to $2\frac{1}{2}$ -in. cuts.

Superior Feeding System

The 650 chopper has a feeding system second to none. Note the drawing at right. As crop material enters the 650's feed area, the feed rolls raise—or lower—depending on how much—or little—material they must handle. Nothing unique about that—except for one very important difference: Instead of the upper rear roll raising in a straight line, and thus moving away from the cutterbar, it pivots up in an arc (A). That means simply that no matter how much material from your high-tonnage crop enters the machine, the feed roll holds the crop positively because it follows the curved surface of the cutterhead. Another big difference is the rigidly mounted shear bar (B) that sets at an angle rather than horizontally as in other choppers. This—combined with our feed rolls—keeps long pieces of crop material from pulling through uncut.



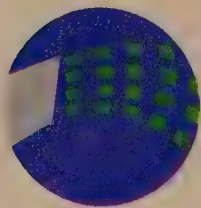
Superior Feeding System

New 555 Forage Harvester

It's the latest forage harvester in the IH line. This economical, trailing, direct-throw harvester is ideal for the farmer with limited acreage. This unit boasts the same powerful cutterhead as the 650. Knives never need rebeveling, and remove easily from the cutterhead for maintenance. As with the 650 model, features include a precision power knife sharpener; all-position axles that can adjust in or out, up and down; and a dial hitch that lets you switch from transport to field position from the tractor seat. Crop units include 2-row wide, 2-row narrow, 1-row, 6-ft. hay pickup and 9-inch cutterbar units.



New 555 Forage Harvester



Forage Harvesting Systems

Add a flail chopper to your machinery lineup and you'll find yourself using it throughout the year for a variety of jobs. Consider for instance daily harvesting of green chop for feeding, harvesting crops from the windrow, shredding corn stalks twice as fine as a rotary cutter, clipping waterways and other vegetative areas.

No. 8 Flail Chopper

As long as you maintain operating speed in the field, you won't plug this auger-blower flail chopper. Chop even when it's raining. Livestockmen who chop a lot of feed especially like this machine. Another IH exclusive is the high-speed, double-cutting rotor with 68 tandem-mounted reversible knives that really attack wet, tough plant material—and turn it into chopped feed. Cutting width is a big 6 feet. Time and labor-saving features abound on the No. 8. Regulate cutting height of 1 to 6-in. from the tractor seat. Easiest chopper on the market to inspect and service.

105-110 Forage Boxes

Team one of these boxes with an IH forage harvester and you have the ultimate in chopping and hauling equipment. Both models identical except that 105 has ratchet drive, 110 has chain drive. Haul 6 tons of forage with 7 x 14-ft. box, 6-ft. sides. Box also available in 7 x 16-ft. size. Unloads from left side. Ample 16-in. cross conveyor auger; 2 or 3 beaters.



No. 8 Flail Chopper



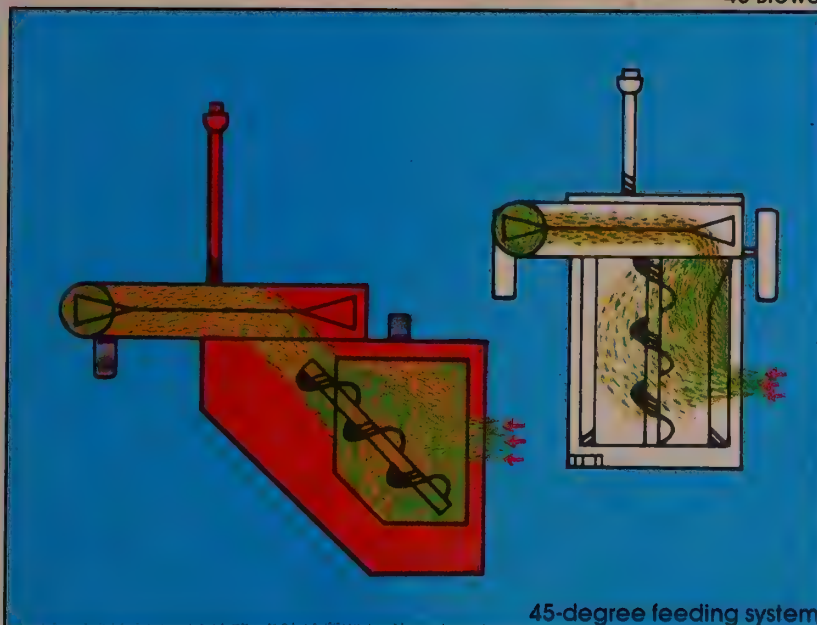
105-110 Forage Boxes

silage blower

Get terrific 100-ton
per hour capacity



48 Blower



45-degree feeding system

48 Blower

Outstanding 45-degree feeding system (see drawing) gives this unit tremendous capacity for its size. You can put up to 70 tons of corn silage and 50 tons of haylage through the 48 in an hour's time. Blower outlet swings up and out of the way, lets you get at rotor and blades fast. All you do is remove two bolts and swing up the top-hinged blower outlet. No need to remove, then replace, the entire rim sheet. When rim sheet becomes worn, simply reverse it and put the worn part on top. Saves time and money on repairs. Other features: adjustable paddles, drive-through wagon clearance, adjustable transport wheels and hitch. Also has water hose support for washing away plant juices that can inhibit flow of material.

56 Blower

Its large 56-in. rotor gives it even more forage handling capacity than the 48 blower. This blower actually works faster than you can unload. With its 45-degree feeding system, it handles 100 tons of corn silage an hour, blows it 100-ft. or more.

45-degree feeding system

Here's how it works: The 39-in. auger, itself an aid to uniform feeding, feeds the 48-inch, 4-blade rotor at a 45-degree angle. That allows the material to move in more of a straight-line direction than it's able to in blowers that feed at a 90-degree angle. At the extreme 90-degree angle, there's a slight pause in the flow of material before it enters the blower housing. Result is reduced capacity and increased horsepower requirement. But with the 48 blower, and its counterpart, the IH 56, there's steady, continuous feeding which adds up to one thing—huge capacity, with minimum horsepower requirement.

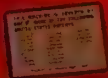


INTERNATIONAL



IMPORTANT

IMPORTANT



Save time and labor in one of the busiest seasons



hay harvesting systems

A good haymaking system is fast, avoids costly field losses, saves labor and increases your profits. It's a big order to come up with a system that meets all of these goals. That's why it's so important to analyze your whole farming operation before you buy haying equipment.

Ask yourself some questions.

What are the alternatives for the kind of forage you have? Do you sell all the forage you harvest, or do you have livestock? If you have livestock, what effect would a change in forages have on your rations and machinery needs?

Don't overlook the quality aspect in forage harvesting. It should be one of your most important considerations. Why? Poor-quality forage limits animals' energy food intake. And the amount of protein in the hay you harvest can have a lot to do with livestock performance.

Harvest quality forage. Hay harvesting, which involves at least some drying of the hay in the field, is a complex harvest situation. Timing is critical. To get top-quality hay, you need to cut it at the proper stage of maturity. That means having equipment matched to your operation. You must

also keep the total curing time short to reduce the threat of weather damage. That's when an IH hay conditioner can trim time between cutting and harvest.

Put together a system. While it's important to get your hay harvested in a hurry for best quality, it's also necessary you spend as little time doing it from a labor standpoint. You need to examine your total harvesting process, not just one part of it. Look at it from start to finish—as a whole system.

Consider doubling-up operations.

If you're a livestock man, labor is one item that's usually on the short side. That's why you may want to look at big capacity equipment or at combining field operations to help you hustle through fieldwork during one of your busiest seasons. That can free you up to devote more time to livestock or other farming responsibilities.

You can see what happens when you combine various haymaking operations by looking at the illustrations below. These tables will help you figure how many man-hours are needed per acre for various combinations of hay harvesting equipment.

How much work hay equipment will do

(acres per hour)

Mower	width	speed (mph.)		
		5	6	7
	6'	3.0	3.6	4.3
	7'	3.5	4.3	4.9
	9'	4.0	5.4	6.3

Wheel-type Rake	width	speed (mph.)		
		5	7	8
	8'	4.8	6.1	6.4
	11'	6.6	7.8	8.8
	14'	8.4	9.8	11.3
	17'	10.2	11.8	13.8

Mower-conditioner (pull-type)	width	speed (mph.)		
		5	6	7
	7'	3.5	4.1	4.9
	9'	4.5	5.4	6.3
	11'	5.5	6.6	7.8

Basket-type Rake	width	speed (mph.)		
		5	6	7
	7'	3.5	4.1	4.9
	8'	4.0	4.8	5.6

Windrower	width	speed (mph.)		
		5	6½	8
	10'	5.0	6.5	8.0
	12'	6.0	7.8	9.6
	14'	7.0	9.1	11.3
	16'	8.0	10.4	12.8
	18'	9.0	11.7	14.4

Baler	width	speed (mph.)		
		3	4	5
	4½'	1.4	1.8	2.3
	5'	1.5	2.0	2.5
	5½'	1.6	2.2	2.8

Figures from American Society of Agricultural Engineers' standards



Hay Harvesting Systems

balers

Better baling begins with the dependable 400s



420 Baler

When you've got 40 acres of alfalfa down and ready to bale, you have to be ready . . . and so does your baler. And once you're in the field, you can't afford "cost-your-crop" delays and breakdowns. You have to start kicking out bales non-stop until the last hay in the field comes popping out of the bale chamber. Of course, even our 400 series balers won't go forever without a pause for maintenance. But our balers, with proper care and maintenance, are built to keep cranking out solid, uniform bales, acre after acre, day after day. We've built a reputation on that. You'll find features on our balers—really important features—that you won't find on competitor's models. For instance:

Power trains

Biggest found on any baler made today. There's a full 100 square inches of driving area on the main drive clutch. And the all-welded plunger runs at a fast 75 strokes per minute, keeping just the right amount of hay feeding into the machine at just the right pace.

Pickups

We think our pickup is the best in the business. You see, there's a good-sized gap between the pickup and the left side of the bale chamber. We designed it that way. On most balers, because the pickup and the bale chamber are all jammed together, you'll either drive on top of the windrow in order to use the full width of the pickup—or move off the windrow and thus use less than the full width of the pickup. Not with an IH baler. Here's another important extra: Our pickups are chain driven and equipped with a slip clutch. No belts to slip, no shear pins to replace.

Knotters

Competitors may try to copy the IH knotter mechanism, but nobody yet has designed a knotter as dependable as our 3-phase knotters. (See chart at right.) Most balers tie ordinary "single diameter" knots that tend to weaken twine fibers. The IH knotter ties a "bow-type, double diameter" knot that's up to 17% stronger by actual tensile strength. What's more, we chrome plate all tying parts on all of our balers to prevent rusting, assure longer wear and better twine handling. Wire-tied bales are stronger, too, thanks to the exclusive IH twister that loops the ends back to form a double-thick, 4-wire twist.

420 Baler

Up to 15 tons per hour capacity with this 14 x 18-inch twine baler. Pickup width is 55 inches. Shuttle glide feed. Choose PTO 2-knuckle drive or a 3-knuckle PTO with 8-inch offset hitch.

430 Baler

Up to 17 tons per hour capacity. Twine or wire tie. Pickup width is 65 inches. Floating auger, packer-finger feed. PTO 2-knuckle drive or regular or heavy duty, 3-knuckle PTO with 8-inch offset hitch.

440 Baler

Up to 19 tons per hour capacity. Twine or wire tie. Heavy duty bale chamber and 65 in. pickup width with five bars. Floating auger, packer-finger feed. Regular or heavy duty 3-knuckle PTO with 8-inch offset hitch.



430 Baler

 5-Phase Knotter Disadvantages		 3-Phase Knotter Advantages	
Phase 1: Needle brings twine up to knotter.		Phase 1: Needle brings twine up to knotter.	
Phase 2: Tucker finger locates or positions twine next to bill hook.	Tucker finger and control linkage do need adjusting.	Eliminated.	Stationary breast plate finger* positions twine automatically.
Phase 3: Twine holder disc assembly holds twine while bale is being formed . . . during tying cycle, twine must be drawn through disc and keeper blade under tension.	Requires spring-loaded keeper blade that needs critical adjusting for heavier bales . . . mis-adjustment often causes broken or lost twine.	Phase 2: Exclusive over-center keeper blade* locks twine automatically . . . releases twine during cycle.	Twine is controlled by a retainer spring that requires no adjustment regardless of bale weight.
Phase 4: Bill hook forms knot.		Phase 3: Bill hook forms knot . . . twine is cut.	
Phase 5: Knife and stripper assembly cuts twine and strips knot off bill hook.	Requires "adjustment" by bending stripper arm.		Uses larger bill hook* to better accommodate varying sizes and types of twine. Knife cuts twine and next bale strips twine off bill hook automatically . . . needs no adjusting.

*Chrome plated on all International balers



Hay Harvesting Systems

balers

Better baling begins with the dependable 400s



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430 Baler

5-Phase Knotter		3-Phase Knotter	
			
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Phase 1: Needle brings twine up to knotter.		Phase 1: Needle brings twine up to knotter.	
Phase 2: Tucker finger locates or positions twine next to bill hook.	Tucker finger and control linkage do need adjusting.	Eliminated.	Stationary breast plate finger* positions twine automatically.
Phase 3: Twine holder disc assembly holds twine while bale is being formed . . . during tying cycle, twine must be drawn through disc and keeper blade under tension.	Requires spring-loaded keeper blade that needs critical adjusting for heavier bales . . . mis-adjustment often causes broken or lost twine.	Phase 2: Exclusive over-center keeper blade* locks twine automatically . . . releases twine during cycle.	Twine is controlled by a retainer spring that requires no adjustment regardless of bale weight.
Phase 4: Bill hook forms knot.		Phase 3: Bill hook forms knot . . . twine is cut.	Uses larger bill hook* to better accommodate varying sizes and types of twine. Knife cuts twine off bill hook automatically . . . needs no adjusting.
Phase 5: Knife and stripper assembly cuts twine and strips knot off bill hook.	Requires "adjustment" by bending stripper arm.		

*Chrome plated on all International balers



Hay Harvesting Systems

windrowers

Get quick-to-dry windrows while you cover acres fast

You'll be amazed at the number of acres you can windrow in a day's time with one of our high-speed machines. Choose your crop—high-tonnage alfalfa, wiry native grass, delicate seed crops, tough-stalked sorghums—all are transformed into uniform, airy windrows in harvest-perfect shape for your baler, combine or forage harvester. And you don't have to shy away from fields where the terrain isn't exactly front-lawn smooth. These tough-built tigers will turn out picture-pretty windrows on just about any terrain that will grow a harvestable crop.

375 Windrower

Hydrostatic, all-speed drive. That's the key to fast, effortless operation of this windrower. With one lever you control forward, reverse and braking. No clutching, no shifting. Hydrostatic, full-power steering. Handle the 375 like it was the family car. Make 180 degree turns. Whole gamut of ground speeds up to a crop-gobbling 12 mph. You select the exact speed right for crop and conditions. And as you change ground speed, all other drives—reel, conditioner, augers, knife and platform—continue to operate at full engine rpm. Result is less fuel per acre, more work per hour. Choose 10-(pea), 12- or 14-ft. dual auger platforms with float-over action to prevent wadding, twisting or bunching. There's also a 14-ft. single auger platform especially for extremely tall, rank crops. Choose either low profile or double eccentric pickup reel. Take your choice, too, of conditioners (standard steel bar and rubber roll or optional double rubber roll) plus gas or diesel engines.



375 Windrower



230 Windrower



225 Hay Swather

275 Windrower

New high-performance 6-cylinder engine (also available on 375 model). Up to 43 % more power. Many of same features as 375. Run at a top speed of 9 1/4 mph on big 24-inch high-flotation tires. Fastest cutting knife in the industry. Get 10, 12 or 14-ft. dual auger platform. Low-profile or double eccentric reel. Green pea attachment with 10-ft. platform available for 275 and 375 models.

230 Windrower

A medium-priced, draper platform windrower with a raft of great features. An especially good choice for harvesting expensive grass seed crops. Radial and vertical platform float lets the 230 hug the ground over rough terrain to minimize crop loss. Low-angle platform design keeps grain heads spread evenly across the top of the swath. Outstanding machine for flax harvest. Choose 10 1/2, 12 1/2, 14 1/2 or 16 1/2 -ft. platform. Two reels, a 54-inch diameter bat reel, or double eccentric pickup reel. Rear caster wheel provides 38-inch swath clearance.

225 Hay Swather

Down, tangled crops don't stop the 225. The over-shot auger design, in which the conditioner is located farther back from the knife than on most machines, allows more time for the knife to slice the stalks before material enters conditioner rolls. There's also less chance of uprooting the crop before it's cut. Tailor windrows to desired width by widening forming shields down to 30 inches, or take them off entirely to lay quick-drying swaths. Has 10-ft. platform. Exclusive torsion bar float lets platform adjust instantly to changing terrain. Rugged, long-lasting four-bat, 42-in. diameter reel.



Hay Harvesting Systems

mower-conditioners

Preserve crop quality,
speed up drying time



990 Mower-Conditioner



1290 Mower-Conditioner

990 Mower-Conditioner

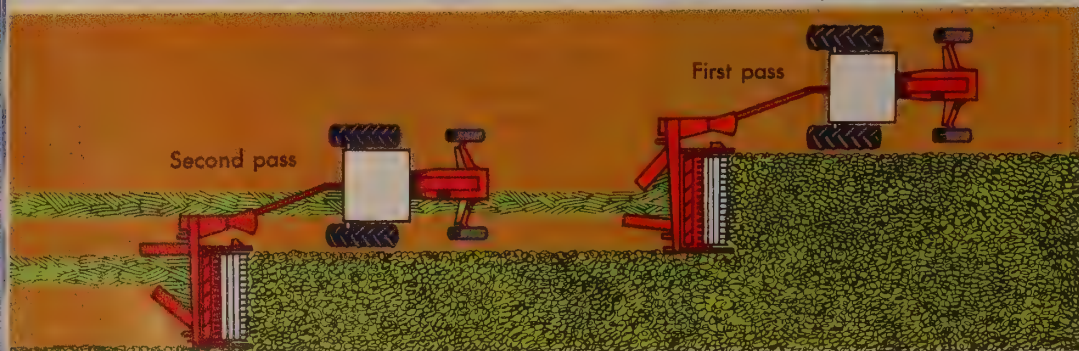
More capacity with less power — and loaded with features you won't find in most competing models. Our conditioner rolls are in a class by themselves. They're big—9 inches in diameter. But that's not all. There's an aggressive fluted steel roll on top, a laminated rubber cord roll on the bottom—an unbeatable combination for maximum feeding efficiency, and minimum power requirement, plus positive, continuous crop flow. Or if you choose, two rubber rolls for ultra-gentle action. Our rolls adjust automatically to crop volume, too. And that saves leaves, aids drying. Another great feature is the patented toggle linkage that separates the rolls automatically as the header is raised. You clear slugs without leaving the tractor seat. Because of the unique design of the feeding and conditioning systems, you operate with less power. Get high production even with 30 hp tractors. Big 44-in. diameter reel. Choose 7- or 9-foot sizes.

1290 Mower-Conditioner

Takes a big cut. Exclusive dual auger system keeps hay moving to rolls without twisting or bunching. Has offset conditioner that puts windrow to left of center. Allows room for tractor between uncut hay and the last windrow. An IH exclusive: Change to endwise transport position in minutes, reducing width to narrow 8 ft., 9 inches.

Save time with No. 8 Rake

Mow and condition, then rake, plus chop or bale in the second trip over the field. Eliminates a separate raking operation — saves leaves as well as fuel and time. From the tractor seat you flip a switch and the windrow-placer sheets on the 990 swing to right or left,



Windrow placer attachment places windrows in close-together pairs

rakes and mowers

High-speed equipment
for fast hay harvest

placing the windrows in close-together pairs. When you're ready to harvest, the No. 8 rake gently places the side-by-side windrows together, just ahead of chopper or baler. The No. 8 rake also can rake a modified swath, easily picked up by your harvesting equipment trailing on the same tractor. And it's ideal for turning windrows, too.

1300 Balanced Head Mower

Sure-cutting machines simple to operate because they operate simply—only three moving parts. No pitman, gears or rods to go bad. Cutter bars of durable boron steel are 40% stronger than those on competitors' models. Counterbalancing arms move in opposite direction of the knife to control vibration. Special design prevents plugging at outer-shoe. Automatic breakaway releases entire frame, plus cutterbar, when mower strikes heavy object. Choose side-mounted, trailing and semi-mounted models.

Pitman Mowers

Exclusive rubber-mounted pendulum to control vibration, keep it from being transferred to mower frame and tractor hitch. Has other features found on IH balanced head mowers. Choose 3-point hitch or semi-mounted models.

35 Rake

Hydraulic or ground drive, both with a 9-ft. swath. Long-wearing rubber-mounted teeth are standard.

30 Wheel Rake

Basic 5- and 7-wheel sizes can be lengthened by one or two wheels. Exclusive "even float" design. Get rubber-mounted or double-coil spring teeth.



30 Wheel Rake



35 Rake



1300 Balanced Head Mower



Speed up harvest with high-capacity equipment



harvesting systems

What goes into the grain tank or cotton basket is what counts when you add up crop profit. When beans, corn or cotton are ready, you want to be able to roll—and that means getting your crop out fast. And if bad weather closes in early—as it has in some recent years—you know all too well that field losses really count up. That is, if you can get your crop out at all.

Boost field capacity. That's one way to keep ahead of nasty weather. And IH has just the right harvesting system to get your crop out fast. Keep in mind that you can boost field capacity at harvest both by using a bigger harvester or running at higher ground speed. But you know there's a limit to how fast you can go without increasing field losses. Putting together your harvesting system and matching it with your particular size of operation depend on a very important factor: How many good working days do you have to get the job done?

Figure number of good harvest days. And that depends on the weather. If you're like many farmers, you probably know from past experience about how many good days you average during the harvest season. If not, check your local weather reporting station, county agent or agricultural university. Once you know how many days you'll likely have for harvest, you'll be better able to determine if you have the right sized equipment to get the job done on time. For example, in checking weather records in your particular area, you know that you normally can expect to lose a third to half of the total time during soybean harvest because of

inclement weather. Counting Sundays off, and perhaps some minor down-time, you figure you may end up with as little as 14 days to harvest your 480-acre crop. You have a 13-ft. self-propelled combine; speed is 3 mph. Checking the table below, you find that you can expect to harvest an average of 3.5 acres an hour. That means you'll be geared up to harvest around 28 acres in an 8-hour period—or 392 acres in 14 days under average conditions. And that's 3 days less than the 17 days you really need. By increasing combine size, you figure you'll be able to get your crop into safety before bad weather hits.

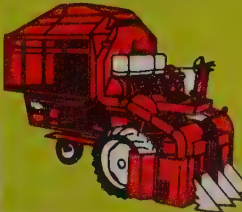
In addition, you can use the accompanying tables to compare different sized equipment. For instance, switching from 4-row 40-in. corn harvesting equipment to 6-row 30-in. equipment could boost acreage by about .4 acres an hour at 2½ to 3 mph. In an 8-hour day, that will increase harvest by 3 more acres under average conditions. But if you do decide to change row width, be sure you consider how it will affect other elements in your machinery system.

For example, if you increase the size of your harvester—regardless of crop—do you have the necessary wagons or transport equipment for hauling? And do you need additional labor? Also, don't forget to evaluate other elements in your machinery system such as planting, tillage and cultivating. That's why you'll want to let IH help you design a properly matched harvest system that, when correctly managed, can be free of bottlenecks.

How much work harvesting equipment will do
(acres per hour)

Self-propelled combine (in small grain)	width	Speed (mph.)		
		2½	3	3½
	10'	2.3	2.7	3.1
	13'	3.0	3.5	4.1
	16'	3.8	4.4	5.0
	18'	4.5	5.5	6.4
	20'	4.5	5.5	6.4

Self-propelled combine (with corn head)	width	Speed (mph.)		
		2	2½	3
	2-40"	1.1	1.4	1.7
	3-30"	1.3	1.6	1.9
	4-40"	2.3	2.8	3.4
	5-30"	2.1	2.6	3.2
	5-40"	2.8	3.5	4.2
	6-20"	1.7	2.1	2.5
	6-30"	2.5	3.2	3.8
	7-30"	2.9	3.7	4.4
	7-40"	3.9	4.9	5.9
	8-20"	2.3	2.8	3.4

Self-propelled cotton harvester	width	Speed (mph.)		
		2	2½	3
	Picker 2-40"	1.0	1.3	1.6
		3	4	5
Stripper 2-40"		1.6	2.1	2.6

Figures from American Society of Agricultural Engineers' standards



new combine features

Best self-propelled combines
International has ever built

Thousands of crop producers like yourself have helped us gain a reputation for building great combines. But we're not a company content to rest on our laurels. We don't think there's a machine around that can't be improved—ours included. So we set out to make our '74 combines the best yet. We think we succeeded. Here are 12 outstanding features, each designed to make combining easier, faster, cleaner—just all-around better—than you'll get with any other combine on the market today. Here's why:

1. New lower profile

We've reduced the overall height of the 815 and 915 combines, but not at the expense of inside separator dimensions. Lets you go through a 12-ft. door with cab (muffler removed).

2. New big capacity unloading

We increased the grain tube from 10-in. to 12-inches. Unload at a tremendous 1.9 bushel-per-second rate instead of 1.2 bushels per second.

3. Now easier to service

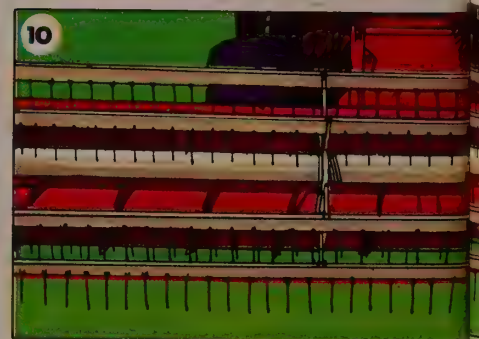
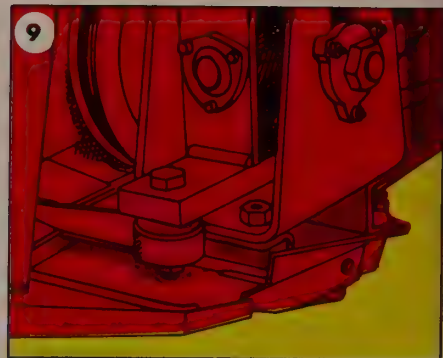
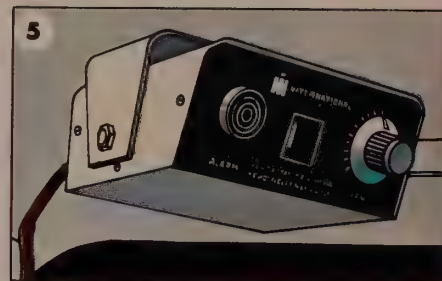
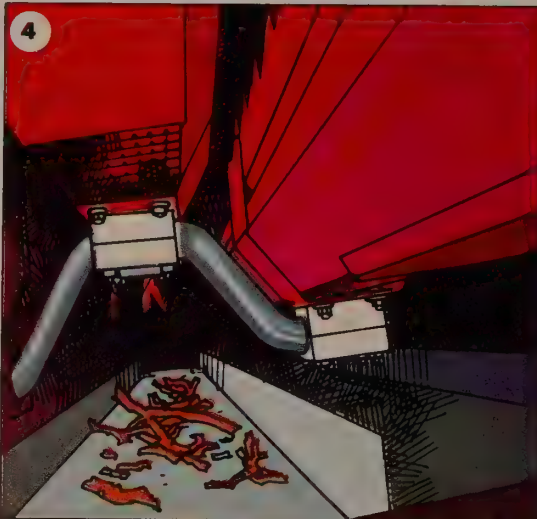
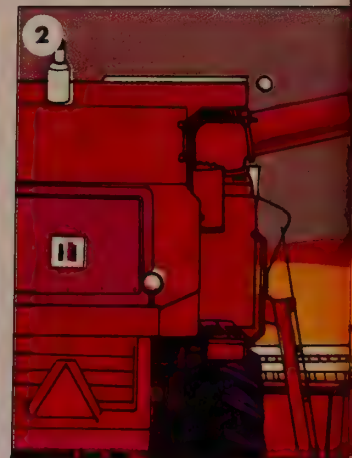
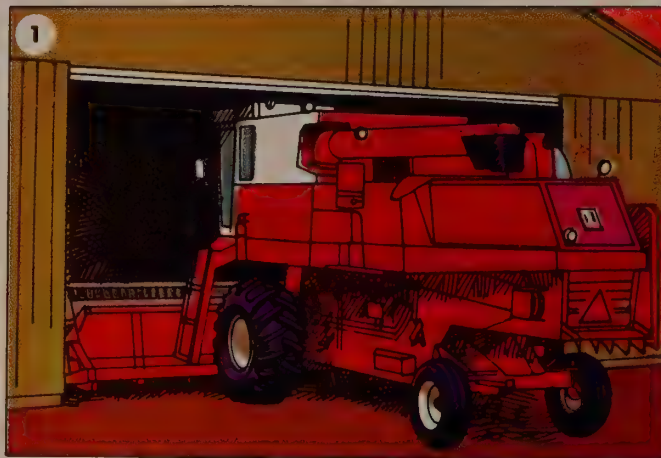
Catwalks on both the left (optional) and right sides make combines easy to service, improves safety.

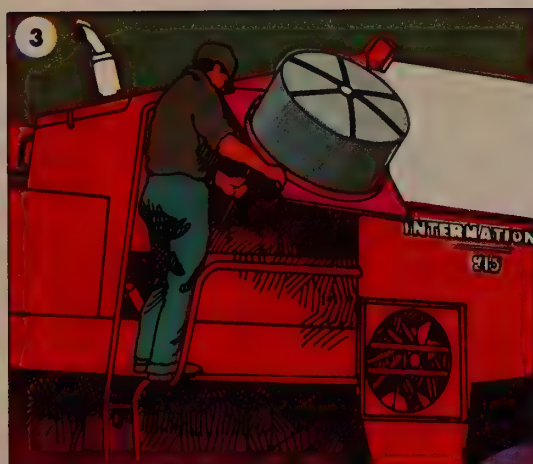
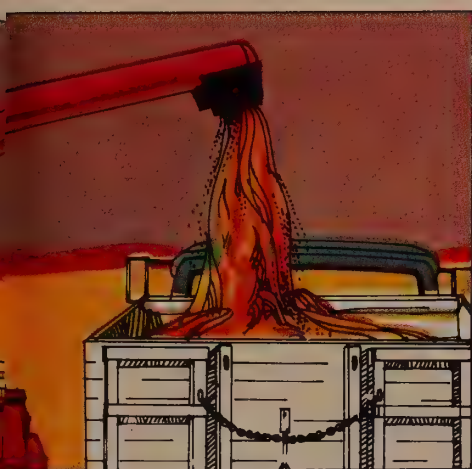
4. New design open fin and wire racks

Exclusive feature. Practically plug-free in any crop. Straw rack crankshaft throws have been increased from 4 to 6 inches for increased action.

5. Digital readout monitor

Factory-installed. Alarm warns the operator of shaft slow-downs immediately. Readout number of non-functioning shaft appears on console. The six combine functions monitored are: (1) clean grain elevator (2) tailing elevator (3) cleaning fan (4) straw racks (5) shoe sieve and (6) straw chopper, also available in 1974 as field attachment.





6. Flexible floating cutterbar

Especially good in soybeans, can save two bushels an acre. Cutterbar, rather than being rigid, rides within one inch of the ground on 18-inch shoes or pads which follow ground contours. Lets the knife reach low pods and lodged stalks.

7. New cylinder design

New "big mouth" design for extra frontal room between cylinder and concave. And the new concave has 14 bars instead of 12.

8. New swinging ladder

Optional spring-assist, left swinging ladder is closer to the ground for better safety. Improves view of left end of header.

9. New rotary knife drive

Rotary type knife drive—no pitman. Reduces vibration, cuts maintenance costs.

10. New 24-foot header

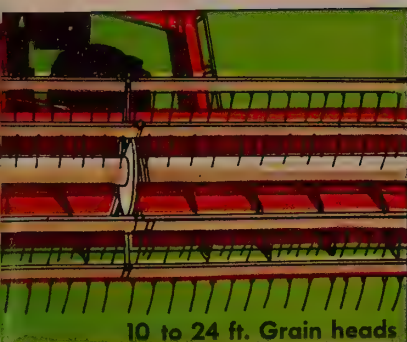
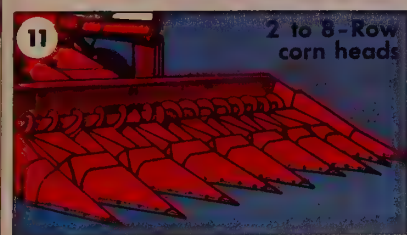
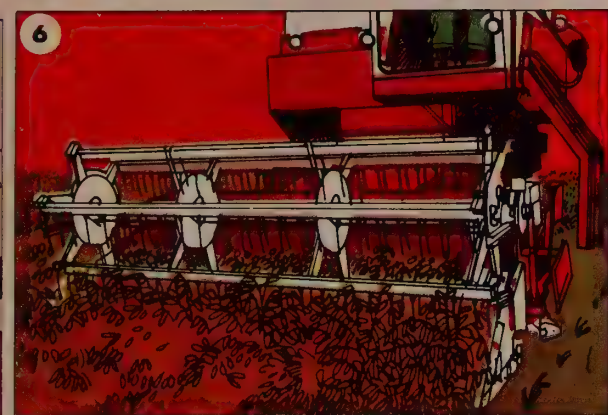
Tremendous capacity with this header. Deep ledge design puts the cutterbar farther ahead of the feeder, lets you set the reel close to cutterbar.

11. New 5 and 7-row corn heads

Ideal wheel spacing for bedded rows. Both available in 28 or 30-inch row widths, and in 36, 38 or 40-inch widths.

12. New low-profile corn heads

Quick-attach convenience. Lower, but not so low they plug up in tall, heavy corn. Plenty of flexibility in row widths. Adjust wide row units (2 through 7-row models) from 36 to 40-in. widths, and narrow row units (3 through 8-row models) from 28 to 30-in. widths. Sectional main drive shafts—instead of one long solid shaft—make it easier to remove or change widths on units.





Harvesting Systems

combines



815 Combine

While we're talking combine features, we can't overlook one that's proved itself in millions of crop acres—Hydrostatic Drive. You get variable speed control, plus instant forward-reverse without clutching or shifting. Combine more in a day. And you'll really appreciate Hydrostatic Drive in soft ground and in down crops.

Another great feature

You'll like our instrument panel, too. Right at your fingertips, always visible, are gauges that warn you if vital engine functions go awry, plus controls for threshing mechanisms. Add our new digital readout monitor that warns of slowdowns in six combine functions and you're set to take all the guesswork out of combining.

915 Combine

Grain headers available up to 24-ft. sizes. Corn heads in 4 through 8-row sizes. Choose from 28, 30, 36, 38 and 40-in. row widths in 4, 5, 6 and 7-row corn heads and 28 and 30-in. row widths in the 8-row head. Hi-lo main axle adjusts to give 3½ inches more ground clearance in muddy fields, or in those with high contours. Grain tank capacity is 146 bushels. Gas or diesel engines up to 162 hp. Comfort-control cabs, with heaters, standard on 915 and 815. Hydrostatic Drive standard.

815 Combine

Grain headers available up to 24-ft. sizes. Choose from 4 through 6-row corn heads. The 5-row head is new, permits better wheel spacing for bedded rows. The 6-row comes only in 28, 30, 36 and 38-in. row widths. The rest are available in 28, 30, 36, 38 and 40-in. sizes. Grain tank capacity is 134 bushels. Choice of gas or diesel engines up to 150 hp. Hydrostatic Drive standard.

715 Combine

A brother to the larger 815 and 915 combines. Choice of two drives: Standard belt propulsion or optional Hydrostatic All-Speed Drive that gives you variable speed control, plus instant forward-reverse without clutching or shifting. Massive 22-in. diameter cylinder extends past the side sheets to use every inch of the separator width for threshing. Cylinder-concave spacing is lever-controlled from the operator's deck. Fin and wire straw racks are practically plug-free—lets you operate at faster ground speeds. Variable speed fan adjusts in seconds from 440 to 940 rpm. Deep-ledge design puts the cutterbar farther ahead of the header auger to save more soybeans and other easily-shattered crops. Also lets you set the reel down close to the cutterbar in short, thin crop stands. Big 7x8-in. clean grain elevator is top-driven. Grain tank holds 65 bu., 96 bu. with extension. Hydraulic reel and pickup drives. One man, with no lifting and no tools, can change in minutes from grain platform to low-profile corn head. IH 6-cylinder gas or diesel engines, up to 107 hp. Cutting widths up to 20 feet. Corn heads available in 2-row sizes with 36, 38 and 40-in. row widths and in 3 and 4-row heads with 28, 30, 36, 38 and 40-in. widths. The 715 is available in Rice, Grain and Maize, Windrow, Edible Bean, Corn, Soybean Specials.

615 Combine

Has nearly all the features found in the larger 715. Grain tank capacity is 83 bu. Clean grain elevator is top-driven, 6x8 inches. 80 hp gas 6-cylinder engine. Cutting widths up to 15 feet. Choose from 2 and 3-row corn heads in the same sizes as the 715 heads.



915 Combine



715 Combine



special combines

One-of-a-kind machines
for special crops, conditions

715, 815, 915 Rice Specials

Take advantage of all the proven features in these machines, designed to harvest rice fast and efficiently. Choose from 13 to 24-foot header widths. Equipped with a spike tooth cylinder and concave. Choice of belt propulsion or Hydrostatic All-Speed Drive in 715. Hydrostatic Drive standard in 815, 915. Perfect-design fin and wire straw racks have big overhead clearance—practically plug-free. Operate at faster ground speeds. Other features include an electric feeder throwout clutch, hydraulic reel lift, variable speed cylinder drive, 70 to 106-bushel grain tank, speedometer and non-adjustable guide wheel axle. Gas or diesel engines.



715 Rice Special

453 Hillside Combine

Only IH has a 4-way leveler combine, yet the 453 costs no more than some 2-way machines. You get Hydrostatic All-Speed Drive, too. It gives you variable speed control, instant forward-reverse without clutching or shifting. Also makes hillside work safer. No danger of wheel spin-outs, because you don't clutch. Advantages of the IH 453 4-leveler machines: You cut up and down, not just along, hillsides. Because machine stays level fore-and-aft, as well as side-to-side, grain won't spill out the rear, or bunch up on the grain pan. You'll save up to two bushels of grain per acre. Combine weight stays on the drive wheels for better traction. The 453 has a big top-driven 8x8-in. grain elevator and 80 bu. grain tank. Choose either 16 1/2-ft. or 18 1/2-ft. header, gas or a new diesel 360 cu. in. engine.



453 Hillside Combine



914 Pull-Type Combine

914 Pull-Type Combine

The perfect combine mate to an IH tractor equipped with Hydrostatic Drive. Takes 13-foot cut. When you're using the 914 on a Hydro-equipped tractor, you maintain PTO speed to the combine while changing ground speed. Great for wet spots and tough windrows. With Hydrostatic Drive you shift on-the-go without touching the clutch or throttle. You'll combine circles around anyone else who has to stop the tractor to make gear changes. Offset platform makes it easy to keep the tractor off the windrow and still center the crop with the feeder—even with dual wheels. Available with a 10- or 12-foot belt-type pickup, also a 5-bat reel for standing grain. Massive 22-in. diameter cylinder extends past the side sheets. Every inch of the separator width gets used for threshing.

Fin and wire racks

Revolutionary fin and wire rotary straw racks are practically plug-free in any crop. Operate at faster ground speeds, and still save all the grain. There's a full 20 inches between the racks and the top of the separator. Unload at a fast rate from the big 150-bu. grain tank. Big top-driven 8x8-inch clean grain elevator is the largest in the industry. The 914 is one of the cleanest-threshing combines you'll find. Even-flow grain pan won't scuff or crack the grain. All-metal chaffer and cleaning sieves move in opposite directions to prevent heavy straw from bridging and causing chaff blanketing. Variable speed cleaning fan adjusts fast and easy. With electric and hydraulic controls you direct from the tractor seat, the 914 operates almost like a self-propelled machine.



Harvesting Systems

swathers

Machines that prepare the way for better combining



75 Swather

75 Swather

Here's a simple-to-operate swather that gives you top performance with pull-type economy. Comes in three models: 15, 18 and 21 feet. Add three feet to each with an optional extension. The 15-foot basic model has end delivery; 18 and 21-foot basic models, offset delivery. Heavy tubular backbone gives the 75 rigidity to stand up under rough field conditions. Adjustable heavy-duty 54-inch diameter 5-bat metal reel. Reel-end guard attachment reduces wrapping in tall or tangled crops. Operates behind any tractor with 30 hp or more and a standard 540 rpm PTO. Self-contained hydraulic system lets you adjust platform or reel from the tractor. Economical endwise transport attachment reduces overall width to less than 11 1/2 feet.



210 Windrower

210 Windrower

Lay grain in smooth, even windrows, ready for the combine, with this rugged machine. Choose from self-propelled 14 1/2, 16 1/2 and 19 1/2-foot models that windrow at speeds up to 10 mph. Heavy duty water-cooled C-153 engine starts easily, runs quietly. Big 42-in. deep platforms adjust from 1 inch below wheel level to 28 inches above. Center delivery opening. Operator's deck is in the middle for full visibility. All controls are within easy reach. High-backed plush seat moves forward, back, up or down, adjusts for your weight. The 210 has cam-activated planetary steering. Handles great—no need to fight the wheel to keep the machine on course. Final drive chains run in an oil bath, last longer than dry-type drives. Independent braking system.

corn picker

Shell, harvest ear corn, even grind — all with the 234 harvester

234 Corn Harvester

The most versatile corn harvester in the field. Features a snapping unit with combine corn-head design. Three rear processing units available to harvest shelled corn, husked or snapped ears, also grind ear corn or shelled corn in the field. Scaloped stalk rolls and revolutionary rotary stripper plates snap ears with a minimum of shelling, help keep field losses amazingly low. Some owners say they save 10 bu. per acre over conventional pickers.

Exclusive high-speed fans under side elevator direct a strong air blast at each ear to blow loose husks, leaves and dirt to the ground behind the operator. Big capacity 12-roll bed has scalloped laminated rubber rolls.

Sheller unit features

Every ear travels the entire 81.4 in.-long shelling chamber, almost 40% longer than some makes. Only an occasional kernel gets left on a cob. Exclusive Multi-Purpose Grinder and Sheller lets you grind whole ear or shelled corn in the field. Sweet corn attachment also available.

Mounts fast and easy

You don't tie up a tractor when you own a 234. Completely remove the machine from the tractor in 10 minutes or less. Has the only self-contained power-mounted universal frame in the industry. All drives are built in—none to install yourself. Mounts on 5 makes of tractors, in over 30 different models. Remove snapping unit in three minutes or less. Change rear processing units in no more than five minutes. So simple, so fast, it's hard to believe.



234 Corn Harvester



Harvesting Systems

cotton harvesters

Pick more cotton per day with these slick-operating machines



622 Cotton Harvester



422 Cotton Harvester

600 Series Cotton Harvester

High-drum or low-drum models with features you won't find on other cotton pickers. Get more crop out per hour with Hydrostatic Drive and independent on-the-go shifting of drums and fans. Slow down even to 1/10 mph, but still maintain high-torque wheel pull. And all without clutching or shifting. IH original Protec-O-Matic safety clutch provides protection against stumps, rocks and other obstructions. Dual tri-clean system with dual basket grates gives up to 100% more cleaning area than other systems. Standard basket capacity is 3,600 lbs., 400 to 1,000 lbs. more than other standard pickers. Choose gas or diesel engines, both with 106 hp. The 622 has 34-in. crop clearance, yet extremely low-profile for added stability and handling ease.

400 Series Cotton Harvester

High-drum or low-drum for picking cotton fast and clean. Drums are safeguarded by Protec-O-Matic — stop instantly if obstruction enters the drum. Nothing to reset. Raise or lower drums individually. All-chromed Clean-Line spindles outwear ordinary spindles. Dof-Flex doffers strip cotton from spindles without fiber twists and stains. Tri-Clean system assures clean cotton in the basket. Cotton bypasses blades of offset fans. Result is less seed cracking, fewer fiber stains. Synchromesh 4-speed transmission, three picking speeds. Engines (gas, LP or diesel) develop 80 hp. Basket holds up to 2,000 lbs., lifts high to dump into wagons with 9 1/2-ft. sides.

New 95 Cotton Harvester

The ideal machine for harvesting storm-resistant cotton. Self-propelled with brush roll stripper capable of harvesting 30 to 40-in. rows. You'll appreciate the advantages of a self-propelled versus tractor-mounted machine. Bigger basket capacity and lower machine height for better traction and stability. Hydrostatic Drive is standard on the 95. With this exclusive IH feature you get on-the-go shifting without touching the throttle or clutch. Big capacity 655 cubic foot basket has pivot height necessary for easy unloading into 12-foot trailers. High-performance diesel engine.

New 90 Cotton Harvester

This machine will harvest your cotton crop more trash-free than you thought possible with a stripper — and at speeds up to 7 mph. Automatic height control senses ahead of the row units, reduces dirt in harvested cotton. Spring-loaded stripper plates under the rolls help prevent stalks from being pulled out of the ground, reduce amount of leaf and stem trash in basket or trailer. Brush rolls, 46 inches long, sweep stalks clean, take less bark, and produce cleaner cotton. Side auger housings, controlled from the tractor seat, drop open for easy cleanout of foreign matter — an IH exclusive. Unique vertical air separation system eliminates need for conventional cross augers. Has 520 cubic foot capacity overhead basket. Attaches to tractor in about 45 minutes. Mounts on IH model tractors, plus several competing models.



95 Cotton Harvester



90 Cotton Harvester



INTERNATIONAL
1150

Substitute machinery for muscle



materials handling systems

Let's face it. There are some farm jobs that can turn into real drudgery. Loading manure, mixing feed or digging a trench takes time. And what's more, they often require a good deal of backbreaking effort. That's why you'll want to consider letting IH help take some of the drudgery out of those unending daily chores.

Examine labor supply. When you put a dollar value on your time—and in most farm situations it must be valued in some way—the time-saving performance of machinery means fewer hours of labor will be needed for a given amount of work. Regardless of the size of your operation, substituting IH machinery for manpower can give you a little more time to spend with the rest of your enterprise, or expand without having to hire additional labor. This savings in labor expenses also helps offset added machinery costs. And if it's going to cost you between \$2 to \$5 an hour to hire labor—assuming you can even find it when it's needed—you're probably better off to substitute bigger machinery for labor you'd otherwise hire.

950-1150 Grinder-Mixers

If you've ever owned an IH grinder-mixer, we don't need to tell you how reliable and versatile these machines are. They go and go, day in and day out, always providing a uniform grind with a minimum of fines. And for initial cost and operating efficiency, the 950 and 1150 stack up against any other grinder-mixer on the market today. Unloading system is an IH exclusive. Because the unloading auger is in the middle, rather than to the side, it reaches both sides equally. Auger moves through a 324-degree horizontal arc—more than 20% wider than most competing models—and pivots 240 degrees vertically. The 12-ft. auger lets you reach over fences and into tight places.

Another IH efficiency plus. Unique dust collecting system relieves pressure inside the hammermill to increase capacity and keep working conditions cleaner. Attachments include a precise electronic feed weighing scale, also a corn sheller.



950-1150 Grinder-Mixers



Materials Handling Systems

manure spreaders

Unique underframe design
one of many great features



580 Single beater spreader



An even better Bear Claw

On many conventional manure spreaders, the hitch attaches directly to the spreader box which places undue stress on the box when loaded. But, with IH spreaders, the box sets on a rugged "A" frame that extends the entire length from hitch to wheels. There's no jerking or twisting on the box when pulling heavy loads because the hitch and box aren't integrated. That's another IH plus that means more for your equipment dollar.

The 500 series

The new single beater spreaders consist of six trailing models (530, 540, 550, 555, 570 and 580) and two truck-mounted models (570 and 580). Sides of the spreader box in models 530, 540, 550 and 555 are made of a new corrosion-resistant steel, guaranteed not to rust through for the life of the spreader. Rated heaped capacity ranges from 148 cubic feet for the 530 model to 312 cu. ft. for the giant 580 models. Slurry pans and hydraulic endgate attachments are available for all models. These attachments provide the means for clean handling of soupy, near-liquid manures.

An even better Bear Claw

More beater paddles and an increased mounting angle makes the highly-regarded Bear Claw paddles and beater even better than before. Each high-strength spring steel paddle has four staggered cutting "fingers" that rip into and unload even frozen manures. The IH 500 spreaders carry more paddles per foot of beater than other spreaders. This, plus the improved mounting angle of the Bear Claw paddles, provides the even spreading pattern for uniform and thorough field coverage.

New 725-735 Liquid Manure Spreaders

Filling the 700 Series spreaders is this simple: Attach the 5-inch diameter rubber hose to the spreader, drop the other end into the pit, open the vacuum pump valve, then head for the field with a full tank not more than four minutes later. The dual-purpose vacuum pump, pto-operated, also serves as a pit agitator. You'll like this feature, too: When the spreader is full, a float-controlled switch automatically closes the line. Compare that feature with spreaders having pop-up flags or hard-to-see indicators you need to watch like a hawk or risk a messy overflow. Emptying the 700 Series spreaders is a simple matter of switching the control level to the pressure port and pumping air into the tank, then twisting a convenient control handle to open the spray valve. You spread up to 30-ft.-wide swaths over a $\frac{1}{2}$ to $\frac{3}{4}$ -acre area in 6 minutes or less. A 9-inch auger-agitator inside the tank keeps manure agitated and forced to the rear of the tank for complete unloading. The International A-frame hitch eliminates stress on the spreader tank. Pressure-hatch at the rear of the tank lets you fill from a separate chopper-type pump—necessary with manure that contains bedding and other fibrous material. The 725 and 735 spreaders are identical except for tank size and wheel and tire size. The 725 has a capacity of 750 gallons, the 735, 1,325 gallons.



555 Single beater spreader



New 725-735 Liquid Manure Spreaders



Materials Handling Systems

manure loaders

Save your back, let a loader
do your lifting



1850 Custom-Built Farm Loader

1850 Custom-Built Farm Loader
Designed specifically for International 354, 454, 464, 574 and 674 tractors. Custom-built and built to last longer. Standard equipment includes a drop retarder valve that controls the rate of bucket drop under full load. The 1850 can lift over a ton—2,300 lbs.—to full height of 9-ft., 5-in.



Fast mounting and dismounting



2350 Mount-O-Matic Farm Loader

2350 Mount-O-Matic Farm Loader

Mount the 2350 or remove it from late model IH and competitive tractors (65 hp and up) in less than 5 minutes, using the tractor's hydraulic power. Mounts with tractors equipped with ROPS canopies, regular or deluxe cabs. Capacity is big—3,500 lbs. to full lift height of 12 ft. Top capacity performance of the 2350 Mount-O-Matic is achieved by utilizing the tractors' hydraulic system. Choose from 60 and 72-in. manure forks and 84-in. material bucket.



3200A Compact Loader

Fast mounting and dismounting

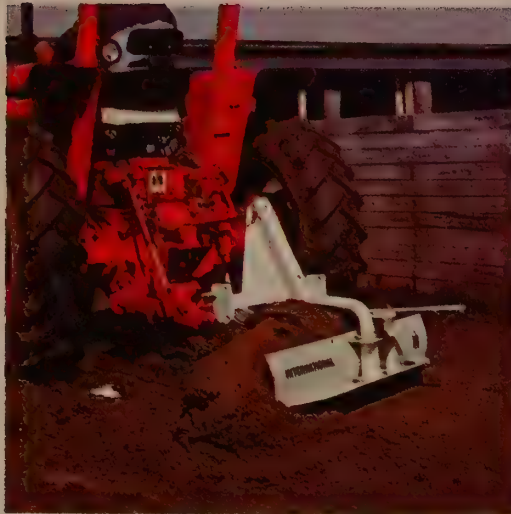
Note in the photograph how the 2350 Mount-O-Matic locks to the front mounting brackets with two simple retaining pins. The tractor's own hydraulics "powers" loader off tractor, and the sub-frame drops down as parking stand. Loader remounts just as easily.

blades, backhoes, wagons

Equipment to make
your work easier

3200A Compact Loader

The handy 3200A turns in 360 degree circle so you maneuver with ease in tight places. Power Amplifier automatically supplies more power as load increases—eliminates need to re-throttle. Has Hydrostatic Drive and 4-wheel traction, oscillating axles. When hands leave the control levers, the 3200A stops instantly and automatically because of its automatic breaking. Loader handles 45" to 58" buckets, plus several attachments including backhoe and snowblower.



Rear-Mounted 100 Blade



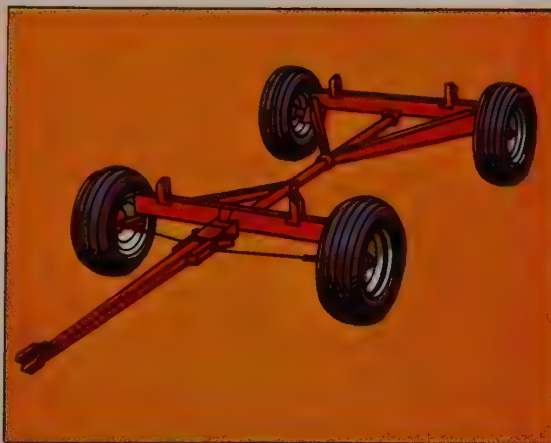
3082 Backhoe

Rear-Mounted 100 Blade

Team this rugged steel blade with your IH tractor and loader and you'll wonder how you ever got along without it. Use it to clean feedlots plus all kinds of ditching, scraping and leveling jobs. Blade angles to left or right, rotates for back filling.

3082 Backhoe

This reliable, fast-working backhoe mounts easily to most tractors equipped with Category I or II 3-point hitches. Mount or remove the 3082 in ten minutes. Dig down to depths of 8-ft., 1-in. Available with 12, 18 and 24-in. buckets.



Model 330 Wagon

Model 330 Wagon

One of six, long-life farm wagons in the IH line. See specifications for all six in the chart on this page. The model 330 has an 8-ton rated capacity and 1 3/4-inch high carbon steel spindles. A variety of wheel options to match your requirements. The 320 and 325 models are fifth-wheel wagons for long wheel base operations and for rough field operations.

Model No.	310	315	330	335	320	325
Capacity	4-ton	6-ton	8-ton	10-ton	5-ton	8-ton
Spindle size	1 1/2-in.	1 5/8-in.	1 3/4-in.	2 1/8-in.	1 5/8-in.	2-in.
Reach size	2 3/8-in.	2 3/8-in.	2 7/8-in.	3 1/2-in.	2 7/8-in.	4.06-in. (outer) 3.50-in. (inner)
Axle clearance	15-in.	18-in.	18-in.	17-in.	15-in.	14-in.
Turn radius	13 1/2-ft.	11-ft.	11-ft.	14 1/2-ft.	10 1/2-ft.	11-ft.
Track	62-in.	70-in.	75-in.	75-in.	66-in.	72-in.
Optional wheels rim size	14 or 15x5	14 or 15x5 15x8 Flotation	14 or 15x6 15x8 or 10 Flotation	16 x 10 Flotation 20x7 Truck 15x5.50 w/side ring	14 or 15x5 15x8 Flotation	14 or 15x5 15x8 or 10 Flotation



INTERNATIONAL
50



residue disposal and land shaping

Crop residue is a valuable by-product of your cropping operation. The forces of nature decompose this residue to enrich the soil. Sometimes, though, it's a slow process. An International stalk shredder lends nature a helping hand by finely chopping crop residue so it decomposes faster . . . makes it a lot easier to plow down, too. There's also another advantage to shredding stalks. It destroys insect larvae such as corn borers and pink bollworms in cotton. Another facet of a well-managed farming operation is land shaping. IH scrapers and landlevelers are big weapons against soil erosion. You smooth out rough spots, fill in newly-eroded areas before they can become full-fledged gullies.

50 and 60 Shredders

Run a gear faster than with some shredders. Unique spiral action knife arrangement requires less power. Free-swinging reversible knives are mounted in a spiral around the rotors, three pairs to a cluster. With each knife cluster hitting the crops at different times, IH shredders take less horsepower than machines with knives mounted in rows. Both models finely shred heavy corn, sorghum or cotton stalks, plus clip pastures, cut and shred

weeds and light brush. Destroys cotton bolls and shreds stalks to help control pink bollworm infestations. Two cutting widths: The 150-in., 50 shredder for up to four 40-in. rows; and the 170-in., 60 shredder for up to six 60-in. rows.

71 Flail Mower

Perfect for mowing right-of-ways, clipping pastures or large area grooming—(parks, ball fields, playgrounds, etc.), other similar jobs. Cut material stays underneath instead of being propelled out the back. The 90 free-swinging knives are $\frac{3}{16}$ -in. thick. Regreasable rotor bearings shielded to prevent wrapping.

Rotary Cutters

Economy 111 model cuts a 60-in. swath of grass and weeds at a height of 1 to 12 inches. Has mounted 3-point hitch. Next in the lineup is the heavy-duty 211 that cuts a 60-in. swath. Ideal for corn and cotton stalks, also light to medium brush. Choice of trailing, 2-point or 3-point hitches. Cut up to 13 inches high with the 2- and 3-point hitch models, up to 14 inches on the trailing model. Two other heavy-duty models, the 311 and 411, cut 66-in. and 72-in. swaths, respectively. Both come in trailing, 2-point and 3-point hitch types that cut to 15 inches high.

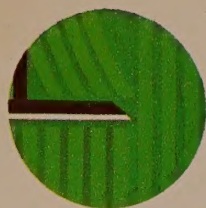
411 Rotary Cutter



71 Flail Mower



60 Shredder



Residue Disposal and Land Shaping

scrapers, ditchers

Make do-it-yourself
soil moving jobs easy

50 and 80 Box Scrapers

Either model ideal for light-duty scraping, landscaping and leveling. The 6-ft. No. 50 is designed for tractors up to 58 hp range with Category I, 3-point hitch. No. 80 is an 8-ft. scraper for use with Category II, 3-point hitch. High carbon steel blades last longer. Adjustable skid shoes can be set for cutting depth you want. Pitch is controlled by the tractor top link. Lengthen it for heavy cuts, shorten for light cuts and finish work. A welded brace from the mast to the top of the box keeps the scraper rigidly in position, prevents rotating movement within the unit.



50 Box Scraper

3 Mounted Ditcher

New moldboard design. Reversible edges cut the ground rather than scrape. They're adjustable, allowing operator to make a flat bottom or deep "V" ditch. Available in 5, 6, or 7-ft. sizes. Deep-ditch arrangement lets you clean permanent-type irrigation ditches as deep as 40 inches.



3 Mounted Ditcher

International Harvester Credit Corporation

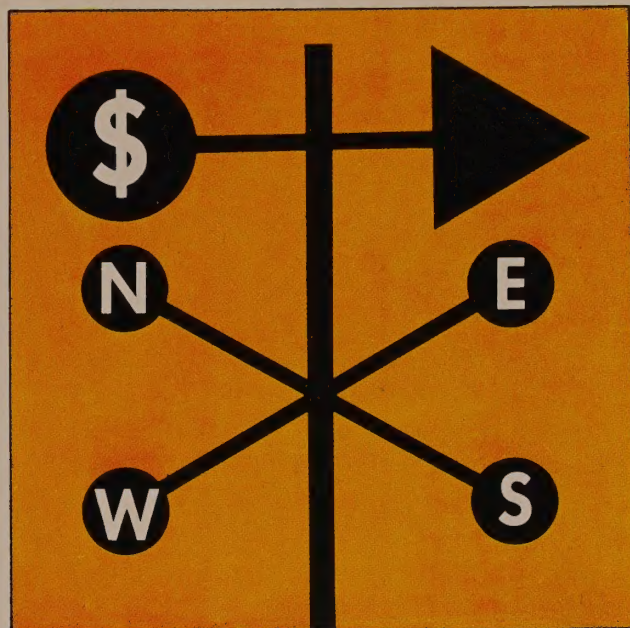
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